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UNITED STATES DISTRICT COURT  
NORTHERN DISTRICT OF CALIFORNIA

BEFORE THE HONORABLE WILLIAM H. ALSUP

ORACLE AMERICA, INC.,	)	
	)	
Plaintiff,	)	
	)	
VS.	)	No. C 10-3561 WHA
	)	
GOOGLE, INC.,	)	
	)	San Francisco, California
Defendant.	)	Wednesday
	)	March 7, 2012

**TRANSCRIPT OF PROCEEDINGS**

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(Appearances continued on next page)

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P R O C E E D I N G S

**MARCH 7, 2012**

**7:30 A.M.**

**THE CLERK:** Calling civil action 10-3561, Oracle America, Inc. versus Google, Inc.

Counsel, can you please state your appearances for the record.

**MR. JACOBS:** Michael Jacobs, Morrison & Foerster, for Oracle. Good morning, Your Honor.

**MR. NORTON:** Fred Norton of Boies, Schiller & Flexner for Oracle. Good morning, Your Honor.

**THE COURT:** Good morning.

**MR. HOLTZMAN:** Steve Holtzman, Boies, Schiller & Flexner, for Oracle American.

**MR. TEMKIN:** Good morning. Andrew Temkin with Oracle America.

**THE COURT:** Okay.

**MR. VAN NEST:** Good morning, Your Honor. Bob Van Nest for Google. I'm here with Dan Purcell, Michael Kwun, Christa Anderson. And we're here, also, with Bruce Baber of King & Spalding, and Renny Hwang from Google.

Thank you.

**THE COURT:** Good morning. Welcome.

**MR. COOPER:** Good morning, Your Honor. John Cooper on behalf of Dr. Kearl. Dr. Kearl is in the courtroom, as

1 well.

2 **THE COURT:** Thank you both for coming.

3 Is Dr. Cockburn here?

4 **MR. NORTON:** Yes, he is, Your Honor.

5 **THE COURT:** All right. Thank you.

6 Okay. We're here for a hearing on whether to exclude  
7 Dr. Cockburn's expert damages report. And I sent out a number  
8 of questions. I hope you've had a chance to study them and be  
9 ready on those.

10 Before we turn to other matters, I'd like to  
11 understand a bigger-picture item, and that concerns this  
12 question:

13 In the original 2006 offer of \$100 million by Sun,  
14 was that a one time paid-up license, or was that going to be  
15 for a limited number of years? Who knows the answer to that  
16 question?

17 **MR. NORTON:** I believe I know it.

18 **THE COURT:** You've got to come up here.

19 **MR. NORTON:** If I can confirm with my colleague for  
20 one moment before I answer the Court.

21 (Pause)

22 **MR. NORTON:** Yes, Your Honor. It was anticipated to  
23 be a 3-year term. And that would have been paid over the  
24 3-year term.

25 **THE COURT:** So at the end of three years did -- once,

1 let's say Google, had started developing its Android platform,  
2 and at the end of three years it had to come back and negotiate  
3 a new license, is that the way it was going to work?

4 **MR. NORTON:** That is where the negotiations would  
5 lead you. The actual draft agreement that was exchanged  
6 between the parties, the last one was sent from Google to Sun  
7 on April 19, 2006. And at that point there is not a term in  
8 the license.

9 There were still negotiations between the parties  
10 even then as to how long -- what the ultimate term of the  
11 license would be. But the term that had been discussed between  
12 the parties was a 3-year term, which would, of course, require  
13 a renegotiation.

14 **THE COURT:** All right. And your name?

15 **MR. PURCELL:** Your Honor, that's not our  
16 understanding.

17 **THE COURT:** What is your name?

18 **MR. PURCELL:** I'm sorry. My name is Dan Purcell.  
19 I'm with Keker & Van Nest, representing Google.

20 **THE COURT:** The court reporter and I don't know who  
21 the lawyers you are. You need to identify yourself for the  
22 record.

23 **MR. PURCELL:** Fair enough.

24 **THE COURT:** All right. Say that again. What was  
25 your point?

1           **MR. PURCELL:** Our understanding is that it was a  
2 fully paid-up license. It was to be paid over --

3           **THE COURT:** Your understanding?

4           **MR. PURCELL:** Is that that was the initial --

5           **THE COURT:** Hand up the proof right now. Do you have  
6 the proof --

7           **MR. PURCELL:** I do not have the initial draft offer.  
8 Neither does, I believe, Oracle.

9           **THE COURT:** All right. Tell me what you base your  
10 understanding on.

11           **MR. PURCELL:** The initial offer was a payment term  
12 over three years, \$20 million per year, total of \$60 million  
13 plus then some amount of downstream revenue sharing. That was  
14 Sun's initial proposal. But I don't believe there was anything  
15 in the proposal that said the license would go away after three  
16 years.

17           **THE COURT:** All right. Thank you.

18           Well, I think this is a very important point. Let me  
19 explain why. If it was a one time paid-up license, then the  
20 idea that the plaintiff here could then seek damages for 2012,  
21 seek damages for 2013, seek damages for 2014, on a royalty  
22 basis doesn't square with what the \$100 million offer was. If  
23 that's the case. Now, I don't know that. I think it's a  
24 matter of proof.

25           In other words, it's an apples and oranges thing. If

1 the hundred million dollars was meant to go forever, to allow  
2 Google to use the technology indefinitely, then you can't turn  
3 around and say, okay, this hundred million dollars was only for  
4 the first three years, and then we get to tag them with  
5 additional damages every single year thereafter.

6 On the other hand, if it really was just for three  
7 years, then I guess the plaintiff can do that.

8 Now, that leads to a different question, which is,  
9 would it have been savvy and smart for Google to go down a  
10 three-year path, get stuck on the technology, get addicted to  
11 the technology, only then to find out that the price would go  
12 up at the end of three years? I don't know. That doesn't  
13 sound smart to me.

14 Has anyone looked at this? Mr. Van Nest, has your  
15 side looked into this?

16 **MR. VAN NEST:** Your Honor, I thought that's what the  
17 experts were trying to come to. In other words, both experts,  
18 as I understand it -- and admittedly I haven't been following  
19 it as closely as Mr. Purcell -- but they're talking about what  
20 would the royalty payment have been for this license?

21 And, as you know, Mr. Cockburn's been up in large  
22 numbers coming down, and Dr. Leonard has been in, you know, low  
23 eight figures. But what I understood was this was a three  
24 year -- they had three years to pay it, but that it was a fully  
25 paid-up license.

1 And what the experts were opining on is, what would  
2 the parties have reached as a negotiation, not how many units  
3 have you sold times a running rate.

4 So I kind of think the parties are taking that into  
5 account in looking at the hypothetical negotiation. We've been  
6 debating a starting point and we've been debating apportionment  
7 and all that. But I really think what they are trying to get  
8 to is, what's the value of the license on these asserted  
9 claims?

10 **THE COURT:** Are you saying a fully paid-up license --

11 **MR. VAN NEST:** Yes.

12 **THE COURT:** -- or a year-to-year license?

13 **MR. VAN NEST:** Fully paid up.

14 **THE COURT:** Did you not hear Mr. -- Mr. Norton or Mr.  
15 Holtzman -- who was it that spoke --

16 **MR. NORTON:** It was Mr. Norton.

17 **THE COURT:** Mr. Norton. Didn't you hear what he just  
18 said?

19 **MR. VAN NEST:** I did.

20 **THE COURT:** He said that come 2012 they are going to  
21 be asking for more damages, come 2013, more damages, and it's  
22 not a fully paid-up license.

23 This is like the sky isn't dark, the sky is bright.  
24 You two are completely apart on this. This is a major --  
25 billions of dollars could be at stake on this question.



1           **MR. VAN NEST:** Again, what I'm coming back to is the  
2 idea that what the experts have been charged with is  
3 determining what the value of that license would have been for  
4 the asserted claims now.

5           Obviously, they were negotiating, as Your Honor  
6 knows, for a much bigger package. But I know that in  
7 Dr. Leonard's case he's asserting a number that would  
8 compensate Oracle for the value of these asserted claims on the  
9 patent copyright side until the end of the -- until the end of  
10 the day.

11           So we may be apart on it, and Your Honor is right to  
12 point it out, but I know that our view is it was a fully  
13 paid-up deal, payable over a 3-year term.

14           **THE COURT:** All right. Let me ask, Mr. Norton -- I  
15 want us to be clear. And maybe I just misunderstand what you  
16 say.

17           Are you really saying that the hundred-million-dollar  
18 deal was only for a 3-year license, and after that it would be  
19 renegotiated?

20           **MR. NORTON:** Yes. The hundred-million-dollar offer,  
21 when it was made as a hundred-million-dollar offer, had a  
22 3-year term attached to it. The parties continued to  
23 negotiate.

24           **THE COURT:** 3-year term to pay the money, or did it  
25 expressly say the license will only last for three years?

1           **MR. NORTON:** It was a 3-year term. Not just three  
2 years to pay, but a 3-year term.

3           Now, at different points of the negotiation the  
4 parties continued to talk about the term. So even after Sun  
5 had proposed a hundred-million-dollar offer with a 3-year term,  
6 there were, of course, further negotiations. But starting with  
7 the hundred-million-dollar offer, that had a 3-year term.

8           At different points -- and there's testimony from  
9 Mr. Gupta that Sun wanted a shorter term. There are other  
10 documents that also -- evidence that would be offered at trial  
11 that would show the length of the term as the parties  
12 negotiated going forward.

13           But to respond in part to what Mr. Van Nest just  
14 said, keep in mind that this is a hypothetical negotiation to  
15 determine the reasonable royalty in this case. Google's  
16 infringement, of course, is different and greater than what Sun  
17 proposed to license.

18           And it would be inappropriate -- even if there had  
19 been a term limit on this license, Sun would not have been  
20 prepared to give up all of its rights to these patents and  
21 copyrights forever, as Google now claims, if it were only being  
22 compensated for a compatible license that --

23           **THE COURT:** Yes, but if you picked a  
24 hundred-million-dollar offer as your starting point, which you  
25 have done, and that was a fully paid-up license offer, then

1 you've got to adjust it for all of these variables. You can't  
2 just assume away that it was not a paid-up license. That ought  
3 to be -- maybe that's just a matter of proof.

4 All right. Has this point been adequately briefed in  
5 the existing motion or not?

6 **MR. NORTON:** I don't believe it's been briefed at all  
7 in the existing motion. The parties have not joined the issue.

8 Professor Cockburn has calculated the damages over  
9 approximately a 3-year term, which brings us to the present.  
10 And that issue has not been joined by the parties.

11 **THE COURT:** All right. Thank you.

12 Now, I have -- my next question for you is to  
13 understand whether or not -- I understand that Dr. Cockburn has  
14 dropped 2012 from his calculation. I assume that's without  
15 prejudice to asking for 2012 damages in the future. But with  
16 respect to the time period that he does ask for damages, is  
17 that number lower or higher, or what, the same as the numbers  
18 in report number two?

19 **MR. NORTON:** The numbers are -- I'm sorry. The  
20 numbers are similar in some respects. And the reason why I  
21 don't say "the same" is that Professor Cockburn, in his  
22 February report, has several different approaches.

23 And if you use the lowest bound of his group and  
24 value approach, the numbers are smaller. If you use the upper  
25 bound of his group and value approach, the numbers are slightly

1 larger. But they are comparable.

2 We did prepare a demonstrative that shows --

3 **THE COURT:** I would be interested to see it. Thank  
4 you for doing that.

5 **MR. NORTON:** I now have copies. I previously  
6 provided it to Google, and have copies today.

7 **THE COURT:** Do you have a set -- did my law clerk get  
8 a set? Okay. Good.

9 **MR. NORTON:** Yes, Your Honor.

10 **THE COURT:** Which chart do you want me to look at?

11 **MR. NORTON:** If you turn to tab 1 of the binder  
12 that's been handed up to the Court, what we've done is in a  
13 single demonstrative tried to answer a couple of questions the  
14 Court had.

15 One was to walk through the steps that Professor  
16 Cockburn employs to adjust the starting point; and, at the same  
17 time, to compare those steps from his September report and  
18 reply and his most recent report of February of this year.

19 And so you'll see -- we've done it for both patent  
20 and copyright. Copyright is at the second tab, but I'll start  
21 with patent.

22 And you can see that once Professor Cockburn applied  
23 the adjustments for marking, and limitation to specific accused  
24 devices, his damages as calculated in the fall, including his  
25 October reply report, were \$46.7 million for patents. Under

1 the group in lower bound, his damages for patents would be  
2 \$17.7 million.

3 Now, for this demonstrative we have included the '476  
4 Patent -- although, we no longer assert it -- just so the Court  
5 could actually see these numbers as an apples-to-apples  
6 comparison. Obviously, dropping the '476 Patent would -- I  
7 apologize. These numbers do include the elimination of the  
8 '476 Patent.

9 On the group and value upper bound, it's  
10 57.1 million. And the independent significance approach  
11 damages are rather close to where they were in October, \$43.7  
12 million.

13 The steps -- I can walk through, if it would be  
14 helpful for the Court to walk through the steps Professor  
15 Cockburn has employed to make that adjustment.

16 **THE COURT:** No, this will do. Perhaps we'll get into  
17 it later. But your chart is very helpful. Thank you.

18 **MR. NORTON:** And if you were to look at tab 2, the  
19 steps are the same. Essentially, there's some patent-specific  
20 steps that must be taken that do not apply to copyright, and so  
21 this chart is a little bit smaller.

22 But, once again, you will see that the range of  
23 damages is smaller for the group and value lower bound, and  
24 slightly greater for the group and value upper bound, and very  
25 similar for the independent significance approach as the

1 numbers were last fall.

2 **THE COURT:** Okay. Good. Thank you.

3 So while I have you here, yesterday I sent out a  
4 request that you check my mathematics, arithmetic really, on  
5 the 10 percent line on Exhibit 34. I was trying to see if I  
6 had worked it out correctly. It would be fine if you say no, I  
7 goofed it up. I just need to -- I'm trying to understand the  
8 approach and, also, I'm particularly interested in that line  
9 item.

10 So did you work through that 10 percent line item?

11 **MR. NORTON:** We did, Your Honor. And, again, we  
12 prepared a demonstratives.

13 **THE COURT:** All right. Which one is it?

14 **MR. NORTON:** It is 6 and 7. One may be easier for  
15 the Court than the other. Why don't I start with 6.

16 The answer to the Court's question is, we did have to  
17 make an adjustment to the Court's math.

18 **THE COURT:** That's fine.

19 **MR. NORTON:** And we weren't quite able to figure out  
20 where we parted ways, but --

21 **THE COURT:** That's okay. Just tell me how you did  
22 it.

23 **MR. NORTON:** Sure. I think it's easier, then, if we  
24 looked at slide 7.

25 **THE COURT:** Okay.

1           **MR. NORTON:** And there are two calculations on slide  
2 7, simply because it wasn't clear to us whether the Court  
3 wanted to use the average of the three curves that are provided  
4 on Exhibit 34 of Professor Cockburn's report, or just the mid  
5 range, which is PatVal. The two numbers are very similar, and  
6 they don't have a significant difference on the ultimate  
7 result.

8           But taking the formula from paragraph 414 of  
9 Professor Cockburn's report, the formula is described on the  
10 upper left-hand quadrant of slide 7 as the value of  
11 patents-in-suit plus the variable A times the value of  
12 patents-in-suit plus one half times the value of the  
13 patents-in-suit should add up to \$597.5 million.

14           And then the formula for A, which is 1 minus  
15 percentage of the patent portfolio attributable to the  
16 patents-in-suit divided by the percentage of patent portfolio  
17 attributable to the patents-in-suit. And that is the formula  
18 in paragraph 414.

19           And using the PatVal curve, which is the curve on  
20 which Professor Cockburn relies, in that scenario when you  
21 solve for A you get 11.85.

22           And then plugging that into the equation on the upper  
23 left-hand side, that would tell you that the value of the  
24 patents-in-suit, using the assumptions in the Court's order of  
25 yesterday, would be \$44.8 million. And applying Professor

1 Cockburn's formula from paragraph 414, the copyrights would be  
2 half of that, or \$22.4 million.

3 **THE COURT:** All right. I don't know how -- I came up  
4 with 32, and you come up with 22.4 or 22.5. Is that true?

5 **MR. NORTON:** Well, no, we come up with 44.8 for the  
6 patents, and 22.4 for the copyrights.

7 **THE COURT:** I see. I see. All right. So you come  
8 up with 44.8. Somehow I came up with 32. And that's for five,  
9 correct?

10 **MR. NORTON:** That would be for five patents, applying  
11 the Court's assumption that those five patents are of equal  
12 value and are all in the top 57.

13 The Court asked that we be prepared to comment on the  
14 reasoning of that assumption, as well. I'm prepared to  
15 address --

16 **THE COURT:** Wait, wait. No.

17 **MR. NORTON:** Thank you.

18 **THE COURT:** I want to make sure that 44.8 is not per  
19 patent, but the grand total of all five.

20 **MR. NORTON:** That is correct. That 44.8, under those  
21 assumptions, would be the value of those five patents-in-suit.

22 **THE COURT:** All right. So you wanted to say  
23 something, and I interrupted you. Please go ahead.

24 **MR. NORTON:** So with respect to the reasoning of  
25 that, the quarrel we would have with the logic of those



1 assumptions is that the analysis done by Dr. Reinhold and the  
2 other JAVA engineers indicates that three of the asserted  
3 patents are not merely in the top 57, not just in the top  
4 10 percent, but are, in fact, in the top 3.9 percent.

5 And because this is not -- that the curve is not a  
6 linear one -- in fact, it was very far from linear -- by  
7 treating patents that are in the top 3.9 percent as though they  
8 were in the top 10 percent, you significantly discount the  
9 value of those patents.

10 At the same time, you actually probably overstate the  
11 value of the '520 Patent because it probably doesn't belong in  
12 the top 57. But we know from the evidence provided by those  
13 engineers that three of the patents that are asserted are, in  
14 fact, in the top 22.

15 And there is very good reason to think that they are  
16 the top three. But even if you only say they are in the top  
17 22, treating them as though they are only in the top 57  
18 significantly reduces their value.

19 And so that's not an assumption that we think is  
20 warranted by the evidence, and would, in fact, be inconsistent  
21 with what the engineers determined based on their assessment of  
22 all the patents.

23 I think that's the primary difference we have with  
24 the logic of the approach.

25 **THE COURT:** What is the -- let me tell you what I

1 have a fundamental question about. You have three samples,  
2 three sample portfolios from the history of the universe. Two  
3 taken from Europe, and one from the United States. So it's a  
4 sample of three. I want you to focus on the word "three." All  
5 right.

6 No one doubts that these curves have a  
7 disproportionate value at the far end. It's obvious from just  
8 the ordinary application of the everyday 80/20 rule that that  
9 would be the case. But that's not what is at issue here.

10 Your Dr. Cockburn -- am I saying that correct?

11 **MR. NORTON:** Cockburn.

12 **THE COURT:** -- Cockburn is trying to draw huge  
13 conclusions from tiny data points.

14 You have three samples. Three. Not hundreds. You  
15 have three samples. Three portfolios that were sampled. And  
16 you looked at the curves on each one of them.

17 And when you're dealing with the top 20 percent,  
18 where you're going to have a lot more data points, the numbers  
19 come out fairly close. 94.4, 90.8, and 98.4. They vary  
20 somewhat.

21 So you take three samples, and for that far  
22 right-hand side of the distribution curve you're getting  
23 somewhat similar results. When you get down to 1 percent, the  
24 results vary widely. 52.6, 42.1, 78.4. Those aren't even  
25 close.

1 In some studies you would treat those as outliers,  
2 that top 1 percent, as very few data points under the curve  
3 there. And some statisticians would treat those as outliers  
4 and not even consider them, and yet that's the basis of your  
5 study.

6 So let me come back to my main point. In statistics  
7 when you do a sample of three -- which is what you've done  
8 here. And how they were selected, I don't know. That's  
9 another question. Let's assume they were randomly selected.  
10 And you get widely varying results on three samples when we're  
11 focusing on the 1 percent now. That's all I'm focusing on  
12 because that's what you wanted to put before the jury. Three  
13 samples that come out with widely varying results.

14 Then you ask the question, what are the odds that a  
15 fourth, randomly selected portfolio taken somewhere in the  
16 United States is going to be even in that range? It could be  
17 lower than 52, when you get numbers of that -- varying to that  
18 extent.

19 So we're not talking about the 20 percent part, which  
20 seems pretty consistent. But as you get down to the 1 percent,  
21 and the .5 percent, and even the 3 percent, even the 5 percent,  
22 the results start to diverge. And I think statisticians would  
23 ask the question, How many sample portfolios do you need?

24 You have three. That's all. Somehow he selected  
25 three. Don't you need ten? Don't you need a hundred? Don't

1 you need to see a lot more results before you can draw  
2 conclusions with any confidence as to that tiny tip of the  
3 tail?

4           It's not even the tail. It's the tip of the tail.  
5 It's the outliers that you're basing your whole case on. That  
6 is my most fundamental -- and this is before you even get to  
7 the way in which your own people started ranking these things.

8           I'm not even getting to that point. I'm asking just  
9 on -- has -- what conclusions and confidence levels can you  
10 place in the very tip-of-the-tail analysis that you have here?  
11 I saw zero in this report. Zero where your Dr. Cockburn  
12 analyzed that problem.

13           So I'm going to give you a chance to answer that  
14 question.

15           **MR. NORTON:** There is a fair amount for me to respond  
16 to there. I have some additional materials, if I can --  
17 including the studies the Court requested.

18           **THE COURT:** Yes. Please, hand those up.

19           **MR. NORTON:** The Court ordered us to produce all  
20 surveys that had patent value distribution curves. All  
21 studies, I should say. And we've done that.

22           I had my back turned. Does the Court have a copy of  
23 that binder?

24           **THE COURT:** You gave me this one right here. Is that  
25 it?

1           **MR. NORTON:** Yes, Your Honor.

2           **THE COURT:** Yes, I do have it.

3           **MR. NORTON:** All right. Thank you.

4           So, again, a number of points to respond to.

5 Dr. Cockburn doesn't rely -- I think it would be more accurate  
6 to say that Professor Cockburn relies upon the PatVal survey.

7           **THE COURT:** Then it's got a sample of one.

8           **MR. NORTON:** That is the one that he uses. Just as  
9 Dr. Putnam, in the *LG Display* case, relied upon a single study  
10 that had a single distribution curve.

11           But Professor Cockburn --

12           **THE COURT:** Is that a federal circuit case?

13           **MR. NORTON:** That is a District of Delaware case.

14           **THE COURT:** Well, that's just a district judge  
15 talking. Did the district judge focus on the point that I'm  
16 raising?

17           **MR. NORTON:** The adequacy of Professor Putnam's  
18 analysis was challenged. It was a bench trial. The defendant  
19 argued that his analysis was too speculative to support an  
20 award of damages. And the Court not only allowed the  
21 testimony, it awarded damages based on that testimony.

22           **THE COURT:** Did the judge raise the point about  
23 relying on the tip of the tail, a tiny set of data points to  
24 draw huge conclusions of the type you're trying to draw? Did  
25 that point get addressed? I don't think so.

1           **MR. NORTON:** That specific point is not addressed.

2           **THE COURT:** All right. Well, I'm raising that point.

3           **MR. NORTON:** Right.

4           **THE COURT:** And that is, to me, a big problem with  
5 your approach.

6           **MR. NORTON:** So let me --

7           **THE COURT:** I'm not quarreling with the 20 percent  
8 part. I think -- because the numbers, you know, with three  
9 samples are coming out the same pretty close. But they start  
10 to diverge wildly when you get down to the small, tiny tip of  
11 the tail thing. You know good and well if you did a fourth one  
12 the number would be different, too.

13           **MR. NORTON:** So let me address that. That last  
14 observation is probably a helpful place to start.

15           In the binder of demonstratives, if you turn to  
16 number 5 --

17           **THE COURT:** All right. Wait. I'm sorry. The one  
18 you just gave me, or the smaller one?

19           **MR. NORTON:** The small one. Wherever possible, I'll  
20 try to use the small one.

21           **THE COURT:** Okay.

22           **MR. NORTON:** So the Court said, if we were to find a  
23 fourth one the curve would be radically different. And what we  
24 found, actually, is Professor Cockburn -- who, of course, is  
25 here today -- has gathered together all of the studies that he

1 can locate that have surveys of patent value, direct evidence  
2 of the economic value of patents, and report sufficient  
3 information that one can actually see a curve in the study  
4 itself.

5 And so these include the PatVal study, which is the  
6 one that he relies upon for the purposes of this report, as  
7 well as four others. And what you see -- and the PatVal curve  
8 on this one is the blue one. And you see the curves do  
9 intersect at various points --

10 **THE COURT:** I'm sorry. The blue one says here,  
11 "Harhoff." PatVal is the red one in your chart.

12 **MR. NORTON:** I'm sorry. You may be looking at 5.

13 **MR. PURCELL:** It's 4. It's 4.

14 **THE COURT:** I'm sorry. Which one did you want me to  
15 look at?

16 **MR. NORTON:** Slide 4, which should look like this  
17 (indicating).

18 **THE COURT:** I am looking at the wrong one. I see.  
19 All right. Okay.

20 **MR. NORTON:** So these are the available curves. And  
21 what you see is there is a fairly tight range here.

22 Now, the Court asked about the confidence interval.  
23 And Professor Cockburn is certainly better qualified than I am  
24 to speak to this, but to answer the Court's question you  
25 wouldn't talk about a confidence interval, normally, for a set

1 of studies where you only have five or six observations.

2 For a confidence interval you would need something  
3 more like --

4 **THE COURT:** But the problem is, you have three sample  
5 portfolios. That's it. You don't have hundreds of samples of  
6 different portfolios.

7 But let me look at your -- your tab 4 for a minute.  
8 Where is Barney on here?

9 **MR. NORTON:** So, Barney is not on here because --

10 **THE COURT:** That's because that number is 91 point --  
11 see, you've selected the lines that help you make your point.

12 But look at your Exhibit 34.

13 **MR. NORTON:** Yes.

14 **THE COURT:** Look at Exhibit 34. Let's just take the  
15 1 percent number. PatVal is 52.6.

16 That's not even the way it comes across on your  
17 chart. I don't understand this chart.

18 Okay. 52.6. And then for Harhoff it's 42.1. And  
19 then for Barney it's 78.4. But you conveniently left Barney  
20 off.

21 **MR. NORTON:** The reason why Barney is not included on  
22 slide 4 is that Barney is not a study -- is not a survey. And  
23 Professor Cockburn will testify that the best evidence of skew  
24 distributions comes from surveys. We have included not just  
25 survey articles in the binder --



1           **THE COURT:** Why did he rely on it in the first place?  
2 It looks like when it became inconvenient for him to rely on  
3 it, he dropped it like a hot potato and then resorted to some  
4 other surveys.

5           **MR. NORTON:** No, that's not correct, Your Honor.  
6 What Professor Cockburn did in his report is he included the  
7 Barney study and the Harhoff study as other examples of studies  
8 that demonstrate a high degree of skew for patents.

9           And the Barney study happens to discuss U.S. patents,  
10 and was helpful to demonstrate the -- anticipate the argument  
11 that Google, of course, made, which was that, oh, well, you  
12 can't assume that U.S. patents are skewed just because European  
13 patents are skewed.

14           But Professor Cockburn never relied upon the Barney  
15 study. He didn't do an average of the curves. He didn't  
16 assimilate the curves.

17           What he said is he said the PatVal study is the  
18 single most reliable study, and he explained why that's the  
19 case at his deposition.

20           There are 23,000 observations, 23,000 data points in  
21 the PatVal study, across several countries, based on extensive  
22 survey data.

23           He testified about his familiarity with the study,  
24 with the way the study was conducted, his experience with the  
25 professional qualifications of the authors, and why he believed

1 that that single study was the best study to rely upon.

2 So -- and other studies that have similarly used  
3 surveys to obtain data about the value of patents have very  
4 similar curves.

5 But I would -- I have to strongly disagree with the  
6 suggestion that he relied upon the Barney study and has done  
7 something different. He has consistently said that the PatVal  
8 study is the study that best predicts the distribution of  
9 patent value. That is the only study that he used to actually  
10 do the calculations.

11 **THE COURT:** I don't know what you've been reading.  
12 Listen to this. Paragraph 405 of his report: "Based on three  
13 recent studies of patent value" -- that's him talking, and then  
14 at footnote 418 -- "I document distribution curves of that  
15 value."

16 So he's relying on those three studies. He says it  
17 right there in paragraph 405. And then he cites to the Barney  
18 study as one of the three in that footnote.

19 **MR. NORTON:** Oh, absolutely. He cites that for the  
20 proposition that there is a high degree of skew in patent  
21 distribution. And he could cite dozens more articles for the  
22 same proposition.

23 But if you then want to take the step of what curve  
24 should he use to best predict the extent to which patent values  
25 are, in fact, skewed, the only curve that he employed to do

1 that calculation anywhere in the report, anywhere in the  
2 exhibits, at any point in his deposition testimony, is the  
3 PatVal curve, because that is the one that he believes is the  
4 best-conducted study that best predicts that value.

5 So the fact that he uses one study doesn't -- doesn't  
6 in and of itself undermine our confidence.

7 **THE COURT:** He didn't use one study.

8 Listen to paragraph 406, "In each of these studies,  
9 the top 1 percent of the patents collectively account for 42 to  
10 78 percent of the value of all patents in that study as shown  
11 on Exhibit 34."

12 So then you turn to your Exhibit 34, which I tried to  
13 do, and read your -- and that's exactly where he gets the 42 to  
14 78 percent. And Barney is 78 percent.

15 I don't see how you can possibly say he did not rely  
16 on the Barney study.

17 **MR. NORTON:** Perhaps I'm not being clear. Professor  
18 Cockburn relies on the Barney study and the wealth of  
19 literature in this area. He specifically cites the Barney  
20 study. He discusses the literature more generally, but he  
21 specifically cites the Barney study as evidence of the degree  
22 of skew in patent portfolio distributions.

23 But when it comes to the point where he has to do a  
24 calculation, the only curve that informs his calculation, the  
25 only curve that he uses to calculate damages in this case, is

1 PatVal.

2           **THE COURT:** So he has got a sample of one. A sample  
3 of one. And you want to assume that any randomly -- any  
4 randomly selected portfolio in the United States will conform  
5 to that one at the very tip of the tail. That's what you -- it  
6 comes down to; doesn't it?

7           **MR. NORTON:** Well, we rely on that survey. I don't  
8 think --

9           **THE COURT:** What makes you think it's similar to  
10 the -- there's nothing to indicate other than Sun had a patent  
11 portfolio. Okay. But, so does a lot of other companies.

12           So, your proposition has to be that that one PatVal  
13 study is identical to or very close to, at the tip of the tail,  
14 any other randomly selected patent portfolio in the  
15 United States.

16           If you don't accept that proposition, then I don't  
17 see how you can apply that one study to any other selected  
18 portfolio in the United States, which in this case happens to  
19 be Sun, but in some other case would be somebody else.

20           **MR. NORTON:** So Professor Cockburn has previously  
21 explained why he believes that the PatVal study does, in fact,  
22 predict the distribution of value in the Sun portfolio. It is  
23 not merely an assumption.

24           **THE COURT:** Where is that in the report?

25           **MR. NORTON:** That's in his deposition testimony.

1           **THE COURT:** In his deposition. Where is it in the  
2 report? It doesn't count if it's in the deposition, except for  
3 impeachment. The report is the place where he's supposed to  
4 lay it out. Where is it in the report?

5           **MR. NORTON:** In the report he explains that he has  
6 used the PatVal survey. In the report he does not say  
7 specifically why he has concluded that the PatVal survey is the  
8 best one.

9           **THE COURT:** He didn't. So his analysis in the report  
10 has to come down to any randomly selected portfolio anywhere in  
11 the United States is going to conform to the PatVal study.

12           Conceivably, the federal circuit could buy that.  
13 But, to me, that is a remarkable proposition unless you're  
14 saying it's going to, in general, conform. That's not so  
15 remarkable.

16           But when you say the top half percent of the top  
17 1 percent is going to conform, that is, to me, a very high  
18 confidence that I don't see where you do any confidence level  
19 assessment, period. There's none in there.

20           **MR. NORTON:** Let me try to address two of the points  
21 that Your Honor just made. Three, in fact.

22           The first is that the justification for the reliance  
23 on the survey must be in the report. Respectfully, I don't  
24 believe that that is the law.

25           **THE COURT:** Well, tell me the law that says Rule 26

1 says every single opinion and every single justification has  
2 got to be in that report. You can't fill in the blanks at the  
3 deposition.

4 **MR. NORTON:** It would be an insurmountable burden of  
5 disclosure if the reasons why a method are scientifically valid  
6 had to be disclosed in the report itself. One would not demand  
7 that a ballistics expert justify the gravitational constant.  
8 That's an easy one.

9 Nonetheless, it cannot be the case that the reasons  
10 why the methodology is sound have to be disclosed in the report  
11 itself. And, in fact, I would be unable to do so right now,  
12 but one can cite any number of Daubert opinions at which part  
13 of the analysis at the Daubert hearing is, Well, what is the  
14 literature? What do other people say? How --

15 **THE COURT:** I read this literature. Some of it,  
16 anyway. I agree with you to a point. I agree that the curve  
17 is going to show that at least the top 20 percent will have a  
18 very disproportionate percentage of the value. So let's  
19 concede that right off the top.

20 That is -- if you took the example that I sent out  
21 and asked you to do, the top 10 percent even, you've come up  
22 with some lower numbers than you are asking for. But the top  
23 10 percent will have a disproportionate value.

24 And I think your studies -- your three studies come  
25 out pretty close numbers on that. But once you drop below

1 10 percent, the numbers begin to wildly diverge in the three  
2 studies that are in the report and which, contrary to your  
3 representation to me, he did say he relied in these paragraphs  
4 I quoted to you.

5           And when you have that kind of divergence and only  
6 three samples, then you have to ask the question, if we did a  
7 fourth sample what are the odds it's even going to fall in that  
8 range?

9           To my mind, it cries out for more samples. And each  
10 one of these patent portfolios is a sample. And you've only  
11 got three. And you're talking about the very tip of the tail.  
12 Not the 20 percent. The half percent of the 1 percent where  
13 there are almost no data points. And many statisticians would  
14 call those outliers, and yet you want to build a case on the  
15 outliers. That's the problem.

16           All right. I'm going to give you a couple more  
17 minutes. You're not convincing me very much. Maybe I'm just  
18 missing.

19           Listen. What is the point of a Daubert hearing?  
20 That your guy can just blow off -- just make an assumption that  
21 one study is going to equal every single other patent portfolio  
22 in the United States, and somehow that is a scientific  
23 principle? Where do you find that in the literature? It's not  
24 in the literature. All that is in the literature is the basic  
25 proposition that it's going to be disproportionate. It is

1 not -- there's nowhere in the literature that it says that the  
2 tip of the tail is going to be the same in every case.

3 Maybe you can find it. But I don't see it there.

4 **MR. NORTON:** We do not assert, nor do I believe we  
5 need to assert, that the tip of the tail would be identical in  
6 every case.

7 What we assert and what I think is sufficient under  
8 *Lucent* -- which says that there's a degree of uncertainty and  
9 approximation in this analysis -- and what's sufficient under  
10 *Daubert* in *Kumho Tire* is that the study gives us enough  
11 information that it allows an approximation of the  
12 apportionment.

13 Now --

14 **THE COURT:** A reasonable approximation.

15 **MR. NORTON:** Absolutely, a reasonable approximation.

16 **THE COURT:** A reasonable approximation.

17 **MR. NORTON:** So when the Court says if we had another  
18 study, well, in response to the Court's question we did  
19 identify additional studies. And those studies are on chart 4.  
20 And those studies show that, in fact, there is a fairly tight  
21 range for the additional studies even --

22 **THE COURT:** After you conveniently leave off the  
23 one -- you know, I don't know -- I can't imagine you thought I  
24 was dumb enough not to realize you had left Barney off your  
25 chart. You know, your new chart. I can't imagine that you



1 thought I wouldn't pick up on that.

2           **MR. NORTON:** Your Honor, I fully expected Your Honor  
3 to pick up on it. I am prepared to address it, as is Professor  
4 Cockburn.

5           Had we included the Barney study, it would simply  
6 suggest the damages should be higher. And I would expect there  
7 would be an argument from Google counsel that that upper bound  
8 outlier study should be disregarded.

9           But the point is, is the PatVal study a good  
10 predictor of the distribution of patents even at the high end  
11 of the range? And if you look at the other studies which do  
12 calculate these values -- they do calculate them, if you don't  
13 limit yourself to the PatVal study but look at other studies,  
14 you're going to get similar results.

15           Now, Google is free to come in and say, well, there  
16 are other studies, and those other studies suggest a range, and  
17 how can Professor Cockburn or the jury be confident that this  
18 patent portfolio really looks like the others?

19           But it's going to be a dispute within that range.  
20 And courts under Daubert have recognized that a certain amount  
21 of uncertainty in the studies, variation in the inputs, is not  
22 a reason to strike the analysis. It goes to its weight.

23           Here, there is an argument to be made -- and Google  
24 is certainly prepared to make it -- that the analysis suggests  
25 a range of results. But the fact that the analysis suggests a

1 range of results doesn't make it unsound.

2           There is a reasonable approximation here, which is --  
3 leads to damages that are a lower bound and upper bound that  
4 are within multiples of each other. Okay. And those are  
5 ranges that experts often present to juries. The damages could  
6 be anywhere between X and 3X. The fact there is a range  
7 doesn't, in fact, make the methodology itself unsound.

8           There is a case, it is -- out of the District of  
9 Colorado, *Cook vs. Rockwell International Corporation*, 580  
10 F.Supp 2d 1071. And that really involved a class action trial  
11 where the plaintiff class asserted they had been exposed to  
12 plutonium from a nuclear plant. And the Court allowed the  
13 plaintiffs' expert to testify at trial about -- it was a dose  
14 expert on the effect of radiation doses.

15           And there the challenge made by the plaintiffs, like  
16 the argument that's been made by Google here, is that the range  
17 implied by all the different studies about what is the safe  
18 level of exposure to plutonium, the ranges were too big.

19           And what the Court said is, "It is undisputed that  
20 risk assessors commonly deal with such uncertainties in their  
21 analyses, and that broad, estimated range of exposure, dose,  
22 and risk may result from that. The existence of such  
23 uncertainties and the consequences that flow from them in  
24 estimating plutonium exposure, dose, and health risk may affect  
25 the weight to be accorded to Dr. Fogel's testimony, but do not

1 provide a basis for finding his work and conclusions unreliable  
2 within the meaning of Rule 702."

3           The standard here is not one of perfection. And the  
4 question is, even, you know, where the Court has correctly  
5 identified that the top of the range is where there is the most  
6 sensitivity, but it is still possible to make a reasonable  
7 approximation based on those studies.

8           And it's possible for the adversary to come in and  
9 say that reasonable approximation has to be discounted because  
10 there are other studies that suggest the numbers should be  
11 lower, and those studies are better.

12           They are better for some reason that an expert can  
13 point to because, unlike the PatVal study, they don't have  
14 23,000 observations, they have 50,000, 60,000. Whatever  
15 reason, they have to say that there is a better study that  
16 better predicts patent value.

17           But that's a cross-examination question. That's a  
18 jury question, because we have a narrow enough range here that  
19 the jury can make a determination which is the better fit.

20           **THE COURT:** All right. I need to let the other side  
21 have their say on this point. So I'll let you make one more  
22 point, and then we'll hear from the other side.

23           **MR. NORTON:** It is not simply Dr. Cockburn coming in  
24 and saying that this study is the best study. He's pointing to  
25 the attributes of the study itself, the attributes --

1           **THE COURT:** Here's one of the problems I've got now.  
2 It's like you're trying to bring in a brand-new report.  
3 Exhibit 34 is what he said he relied on before. There were  
4 three studies, including Barney. All right.

5           Is it fair now to say, okay, we're going to junk that  
6 and we're not going to rely on Barney; we are throwing that out  
7 and now we've got these other studies?

8           Yes, it's true that I asked to see the other studies.  
9 I wanted to see what the literature requires here or suggests  
10 here. But in fairness to the other side, don't we have to go  
11 back to square one now? Or do we toss out this report as --  
12 you're changing the report.

13           **MR. NORTON:** Absolutely not, Your Honor. Let's say  
14 that this were a case where the issue had to do with exposure  
15 to some carcinogen. And the expert came in and said, I have  
16 one study. I have one study that I rely upon that was  
17 conducted by the National Institutes of Health. It was done by  
18 the best people. It went on over a number of years.

19           **THE COURT:** And concluded what?

20           **MR. NORTON:** And it concluded that there is a  
21 correlation between exposure to this carcinogen and cancer.  
22 And I, as a result, have a -- can conclude to a reasonable  
23 certainty that, in fact, the plaintiff's exposure to this  
24 carcinogen could have been the cause of their ultimate cancer.  
25 One study. It is a gold standard study. It is the best study

1 out there. I don't know of any better. All the best people  
2 worked on it. This is the one I rely on.

3 And the other side comes in and says, Well, you know,  
4 one study. How can you rely on one study?

5 And so then the Daubert challenge is, is it -- is it  
6 reasonable as a matter of science or as technical knowledge, is  
7 it reasonable to draw those conclusions from that single study?

8 Well, what reasons are there to assume that it is  
9 not? Are there other studies that come to different results?  
10 Is there a methodological flaw in the underlying study on which  
11 the expert relied? Would a cancer researcher not rely upon  
12 this particular study in trying to assess carcinogenic effects?

13 Those are the questions that would be asked. But the  
14 fact there is a single study doesn't mean that the study is a  
15 bad one, and doesn't mean that you can't draw conclusions from  
16 it.

17 So, Your Honor, we're not asking to put in these  
18 other surveys. We are asking that the Court recognize that  
19 when one looks to other surveys they tell us that the PatVal  
20 survey is an awfully good one.

21 **THE COURT:** Let's hear from the other side.

22 I would like for -- and your name is what?

23 **MR. PURCELL:** Dan Purcell, Your Honor.

24 **THE COURT:** Mr. Purcell, I want you to start by  
25 addressing the chart counsel handed up, the chart that leaves

1 off Barney.

2 I understand it leaves off Barney. Counsel's point  
3 is that these other studies have a similar curve, and the range  
4 is not as wildly varying as I had suggested earlier.

5 So my question to you is, what's your answer to this  
6 tab number 4, that counsel has handed up?

7 **MR. PURCELL:** Our answer to that is pretty much what  
8 was in our brief, which is that these studies are a bad fit for  
9 the portfolio that we actually have here.

10 Your Honor was talking about randomly-selected  
11 portfolios and how would I know that the PatVal study would map  
12 to a randomly selected portfolio.

13 The Sun portfolio here is not randomly selected.  
14 Perhaps, if Oracle had looked at the entire 14,000-some patents  
15 that Sun had at the time Oracle acquired Sun, that would be  
16 randomly selected.

17 What they did, instead, was winnow those 14,000 down  
18 to 1300 that might be relevant.

19 **THE COURT:** I don't want to get into, yet, the way in  
20 which they ranked the Sun portfolio.

21 **MR. PURCELL:** I'm not talking about ranking, Your  
22 Honor. I'm just talking about the winnowing down of a randomly  
23 selected group of patents to a narrowly focused group of  
24 patents that are specifically relevant to a technology area.

25 And there actually is one study in the binder that

1 Your Honor has, the larger binder. It's at tab 11. It's the  
2 Schankerman study. And I have --

3 **THE COURT:** I don't have any tab 11.

4 **MR. PURCELL:** The larger binder, the thicker binder  
5 with the studies in it.

6 **THE COURT:** This?

7 **MR. PURCELL:** Correct. And I actually have a loose  
8 copy of it here, if that would be easier, along with --

9 **THE COURT:** No, I have it here.

10 **MR. PURCELL:** -- our demonstratives.

11 **THE COURT:** I want to make sure I understand what you  
12 just said, though.

13 I don't think you're coming to grips -- or maybe I  
14 just don't understand it -- with counsel's point. I'm going to  
15 hold up this chart. You see he's got this chart.

16 **MR. PURCELL:** I do.

17 **THE COURT:** And the colored lines, they vary somewhat  
18 but they vary maybe 20 percent, not 50 percent.

19 And, oddly enough, when they get down to the tiniest  
20 numbers, the variation is less than when it's up higher, for  
21 some strange reason.

22 But down at the 1 percent level the variation is 52,  
23 42, 42, 44, 48. So what they are suggesting is, all right,  
24 that's pretty good proof that if we looked at the Sun portfolio  
25 that the top 1 percent of the patents would be in that range of

1 42 to 52 percent of the overall value.

2 Now, I don't hear you -- what is so special about the  
3 Sun portfolio that would distinguish it from these five  
4 portfolios?

5 **MR. PURCELL:** The answer to that is that they are  
6 looking at the wrong portfolio. They are not looking at the  
7 Sun portfolio. They are not looking at all of the patents that  
8 Sun had, which would be equivalent to this randomly selected  
9 group of patents that were studied in these studies.

10 What they've done is specifically selected a  
11 subcategory of patents that are relevant to this technology  
12 area and that are presumptively more valuable to Google during  
13 the course of a hypothetical negotiation.

14 **THE COURT:** So I see your point. So Sun actually had  
15 more than 597 patents.

16 **MR. PURCELL:** Correct.

17 **THE COURT:** How many did it have?

18 **MR. PURCELL:** In the -- the number that was reported  
19 at the time of the Oracle acquisition of Sun was around 14,000  
20 total patents.

21 **THE COURT:** So what you're saying is if we looked at  
22 the 14,000 -- I don't know if you're conceding it or just  
23 saying, even if the 14,000 portfolio would be in the range of  
24 this multi-color chart, we're not dealing with 14,000, we're  
25 dealing with 597 that were specially selected to enable the



1 smartphone --

2 **MR. PURCELL:** Right, correct.

3 **THE COURT:** And so, therefore, -- doesn't that  
4 mean -- doesn't that sort of indicate that all of the 597 would  
5 be more valuable? Or would they be less valuable? What is  
6 the -- what effect would that self-selection have on the  
7 analysis?

8 **MR. PURCELL:** Well, what they've done, what Google --  
9 sorry, Oracle has done by the methodology Dr. Cockburn has  
10 used, they've got rid of all of the chaff. They have got rid  
11 of all the patents that are the least valuable in the context  
12 of a hypothetical negotiation. So you're starting with a pool  
13 of patents that are presumptively at least of some value to  
14 Google. And then they winnowed those down and selected the  
15 ones that are the most valuable.

16 So what they've done, essentially, is they've gotten  
17 rid of the patents that are in the 14,000 pool, that are of the  
18 least value. And so you're starting with a pool of patents  
19 that are all presumptively more valuable, which is inflated in  
20 number.

21 **THE COURT:** So you're saying that of 597, the least  
22 of the 597 are of greater value than the least of the 14,000?

23 **MR. PURCELL:** Presumably, yeah.

24 I think it's actually 569, Your Honor, that are in  
25 the narrowed portfolio, are presumably already in the top

1 10 percent of the 14,000, at least in the context of this  
2 hypothetical negotiation.

3 **THE COURT:** Therefore, the value of the hundred  
4 million should be more evenly distributed over the 569 than if  
5 you were distributing it over -- because the hundred million  
6 dealt with the 569, not with 14,000.

7 **MR. PURCELL:** Correct. This is a -- not an argument  
8 about the results of these studies. I mean, the results of  
9 these studies are accurately captured on the chart. We're not  
10 quarreling with those. What we're saying is these studies are  
11 a bad fit for the portfolio at issue here.

12 And the one point I wanted to make has to do with the  
13 Schankerman study, which we passed up a copy to Your Honor.  
14 This is the one that's at tab 11. And the demonstrative slides  
15 that we also handed you, slides 2 and 3 in that slim packet,  
16 talk about Schankerman.

17 What Schankerman did alone, I believe, among the  
18 studies in that binder was actually do what we suggested ought  
19 to be done in our brief, which is look at a specific technology  
20 area and see if the skew is different or the same in that  
21 technology area as it is across the entire spectrum of patents  
22 generally. A better faucet. A better mousetrap.

23 And what Schankerman did -- and this is slide 3 of  
24 the slides that we handed up -- was look at how the skew works  
25 in different industries. And Schankerman looked at four:

1 electronics -- which is the closest thing we have here; this is  
2 an electronics product, the smartphone -- pharmaceuticals,  
3 chemicals, and mechanical. And in all those industries there  
4 was skew.

5           Again, we're not doubting the existence of skew.  
6 Obviously, a lot of patents are really not very valuable at  
7 all, and a small number are very valuable. But the range is  
8 different and lower in these industries than any of the studies  
9 that are in the binders.

10           And what Schankerman found is in the electronics  
11 industry the top 1 percent of patents only account for about  
12 24 percent of the value.

13           **THE COURT:** Where is that in your report?

14           **MR. PURCELL:** This is the slide 3 of the  
15 demonstratives. And it's Schankerman at 95 and 96.

16           **THE COURT:** Well, let me -- I'm open to Schankerman  
17 now.

18           **MR. VAN NEST:** We handed up a small set of slides,  
19 Your Honor. They look like this. I'm sorry --

20           **THE COURT:** Oh.

21           **MR. PURCELL:** Right. So there's a summary chart at  
22 slide 3. The third page of our demonstratives summarize it.  
23 But it's at pages 95 and 96 of the Schankerman article.

24           And so what we see from Schankerman is that in the  
25 electronics field 24 percent of the value is in the top

1 1 percent, 55 in the top 5 percent. Which is a significantly  
2 lower value than in the studies that Dr. Cockburn used, which,  
3 again, don't attempt to focus on the technology area at issue  
4 here.

5 And that was the beef that we raised in our brief,  
6 which was, why did you look at a random sampling of patents  
7 across technology areas, not a single company portfolio? Why  
8 didn't you focus your inquiry on what exactly was going on  
9 here?

10 Schankerman tried to do that and ended up at a  
11 significantly lower number.

12 **THE COURT:** All right. So what other issues do you  
13 want to raise before you get to the way in which the company  
14 ranked the patents, and just based upon the curves, the tip of  
15 the tail and all of that? What other issues do you want to  
16 raise?

17 **MR. PURCELL:** Your Honor, I don't have anything  
18 further to say about the studies.

19 **THE COURT:** Mr. Norton, what is your answer to  
20 Schankerman and the point that counsel just made about the  
21 14,000 versus 569?

22 **MR. NORTON:** So let me start with the 14,000. First,  
23 the number is misleading. It's 14,000 worldwide patents, which  
24 counts every patent issued by a separate country as a unique  
25 patent. So 14,000 --

1           **THE COURT:** How many were in the USA?

2           **MR. NORTON:** I did not know the answer to how many  
3 U.S.-issued patents Sun had in 2006.

4           **THE COURT:** Was it more than 569?

5           **MR. NORTON:** Absolutely.

6           So, then, Google counsel's argument was that the 569  
7 are disproportionately valuable.

8           There is no basis for that assertion, which is  
9 contrary to the testimony of the JAVA engineers.

10           What the JAVA engineers testified they did was they  
11 had -- asked for a word search for every patent that had the  
12 word "JAVA" in it, "byte code" in it, or had been identified as  
13 an inventor, Mr. Gosling or Mr. Fresko, and limited those to  
14 the patents that were issued prior to June 2006.

15           Once they had that set of patents, they said, well,  
16 which ones are smartphone patents? Not, which ones are  
17 valuable patents? Just, which ones are smartphone patents? So  
18 it's a portfolio that's limited to a technology area, but it is  
19 limited to more valuable patents.

20           And Google's assertion, which they have made  
21 repeatedly in the briefs, is somehow these were selected for  
22 value to Google is just false. There is no basis for it  
23 whatsoever.

24           And that is their entire argument for why this  
25 particular portfolio shouldn't look like the distributions we

1 see in the studies.

2           So with respect to the Schankerman study, the  
3 demonstrative Google handed up you will see you have  
4 electronics, pharmaceuticals, chemical, and mechanical. And  
5 you will see electronics actually have a higher degree of skew  
6 in the Schankerman study than other industries.

7           And that's important because what it suggests is that  
8 if we had used, instead of the PatVal study, a study that  
9 provided a curve for the electronics industry alone -- because  
10 PatVal has lots of different kinds of patents -- that the  
11 PatVal study would suggest higher results.

12           And the reason for that is that there is a  
13 significant methodological difference between what  
14 Mr. Schankerman did -- I'm sure it's Dr. Schankerman -- what  
15 Dr. Schankerman did and what the authors of the PatVal study  
16 did.

17           And the difference is that the Schankerman study is  
18 based on renewals. And, as Dr. Schankerman explains in the  
19 study itself -- and do we have a copy of the binders? Thank  
20 you.

21           The challenge of the renewal survey -- and Professor  
22 Cockburn is more than prepared to explain the methodologies of  
23 these different surveys. But the renewal surveys, what they do  
24 not do is break down in a granular fashion the patents at the  
25 top of the range.

1           So what they tend to do, and what I believe  
2 Dr. Schankerman's study does, is it says, well, how many  
3 patents are above X?

4           And if you don't make X big enough, then it doesn't  
5 allow you to draw very fine conclusions about the value of the  
6 patents in the top 1 percent or 5 percent. It tends to -- all  
7 of the renewal surveys, renewal studies, will tend to flatten  
8 the curve at the top end of the range.

9           And they do so because there is a systematic bias in  
10 every single one of those surveys, because rather than to  
11 continue to ask, how much is your most valuable patent worth,  
12 they say, how many patents do you have that are worth more than  
13 X? Because that's what they're interested in knowing.

14           That's fine for their purposes. But what they don't  
15 do is go all the way up to figure out, well, where are the most  
16 valuable patents?

17           And so the Schankerman study, as one would expect,  
18 has a flatter distribution curve than the surveys because  
19 surveys test the actual value of the patents that are being  
20 measured.

21           But what's interesting about Schankerman is that  
22 Schankerman tells us that applying that methodology  
23 consistently across industries, we see a higher degree of skew  
24 in the electronics industry than in pharmaceuticals, chemicals,  
25 and mechanical industries or mechanical patents.

1 And so what that tells us is that if you correct  
2 Dr. Schankerman's methodology, and did it as a survey, one  
3 would expect that electronics patents would be more skewed.

4 And to the extent that electronics in this context  
5 includes software patents or smartphone patents -- as it likely  
6 would -- I would suggest that the PatVal study is probably a  
7 conservative approach.

8 I think I have responded to Mr. Purcell's points.

9 **THE COURT:** All right. Thank you.

10 At this point we are going to change the subject and  
11 go to the next step of the analysis, which is the ranking by  
12 the in-house engineers.

13 So let's hear from Google on what your arguments are  
14 against that and why it would be so unreliable. And keep in  
15 mind that I'll let your side use in-house people. And you said  
16 that was fine, and I agreed with you. But now it seems like  
17 whenever the other side does it you're somehow offended. So  
18 you've got to explain that part.

19 **MR. PURCELL:** Let me clarify that, Your Honor.

20 We are not saying that it is improper for Oracle to  
21 use in-house people. We recognize that that's a bias issue for  
22 cross. We're content to leave that for trial.

23 The only point we were making was the point, really,  
24 that I just made, which was that what Oracle did was select  
25 from a much larger group of patents a group of patents that are



1 presumptively more valuable to Google because they relate to  
2 the technology Google was trying to commercialize.

3 Google is not building a car here. Google is not  
4 building, you know, a sewer system. Google is building a  
5 smartphone platform. So when Oracle selects smartphone-related  
6 patents, they are necessarily selecting a group of patents more  
7 valuable to Google's purpose.

8 And Oracle used engineers not only to do that, just  
9 inherently, they used engineers that had a background in  
10 preparing the case for litigation. And they admitted at  
11 deposition that they weren't able to put away that experience  
12 and they, in fact, did rely on that.

13 So it goes to the selection of the portfolio as a  
14 Daubert issue. Beyond that, it's a point for cross at trial.  
15 So I don't know that there's a whole lot to add to the argument  
16 that I just made.

17 I do want to point out one other thing, though.  
18 Mr. Norton was trying to draw a distinction between surveys and  
19 citation -- sorry, renewal studies.

20 The Barney study that Dr. Cockburn relied on was a  
21 renewal study, and it had a much, much higher -- higher-sloping  
22 curve that had the top 1 percent in the 90 range. But that's  
23 all I have to say, really, about the engineers.

24 **THE COURT:** Sounds like -- it does sound like that is  
25 just a cross-examination point.

1           **MR. PURCELL:** As I said, Your Honor, it is,  
2 primarily.

3           The only relevance it has to Daubert is in the  
4 selection of the portfolio and whether or not the studies  
5 Dr. Cockburn used are a proper fit for the portfolio that's at  
6 issue here, which isn't a random sampling, which was prior  
7 vetted by Oracle engineers for value to Google in the context  
8 of the hypothetical negotiation.

9           **THE COURT:** All right. I'm going to take that as a  
10 concession that your point is not very strong, and it's going  
11 to be for cross-examination that the in-house people did the  
12 ranking.

13           What's your next objection to the report?

14           **MR. PURCELL:** Really, Your Honor, our objections --  
15 the main one, which relates to both the independent  
16 significance approach and the group and value approach in  
17 Dr. Cockburn's report, is indeterminacy.

18           This is something we've been struggling with from the  
19 beginning of the damages proceedings in this case. The  
20 independent significance approach, he says 25 percent of the  
21 portfolio at least with respect to the patents, 12 and a half  
22 at least with respect to the copyrights.

23           At deposition, when he was asked what does "at least"  
24 mean he said, well, the patents could be 50 percent, they could  
25 be more; the copyrights could be a hundred percent of the value

1 because it could have been the case that without these APIs  
2 Google could not have commercialized Android at all.

3           So we don't want to be in a situation where  
4 Dr. Cockburn has the freedom going to trial to say damages  
5 could be 17 million; they could be 600 million; they could be  
6 the entire value of the portfolio.

7           And that's the objection under the independent  
8 significance approach, is that there's absolutely no limit to  
9 it. And there's also absolutely no methodology. It's just:  
10 Here, I looked at all of the evidence in the case. I  
11 synthesized it, and the number that came out of my brain was  
12 25 percent.

13           That's not replicable by anyone else.

14           **THE COURT:** In his report -- let's be clear what you  
15 extracted in the deposition on cross-examination versus what's  
16 in the report.

17           I want to say to you, at trial you experts will  
18 only -- you have to stick to chapter and verse of what's in the  
19 report. You cannot even get into what's in the rebuttal reply  
20 report. You must limit yourself to the conclusions in the  
21 original report.

22           And I'll keep it up here, and if somebody says,  
23 "Beyond the scope of the report" I sustain that objection. I  
24 turn to you and say, Where are those words in the report? And  
25 if those words are not in the report, or something very close

1 to it, it is stricken.

2 Now, the problem, though, is on cross-examination the  
3 lawyers will often go way beyond what's in the report. They're  
4 not -- the expert is not limited to what's in the report, just  
5 like you're not limited to what's in the report on  
6 cross-examination.

7 So if you want to get into things that he didn't  
8 opine on in the report, that's your problem; isn't it?

9 **MR. PURCELL:** I understand the danger of opening the  
10 door, and that would be our problem.

11 But what we are moving on is to try to limit him to  
12 what's in the report at least for purposes -- if Your Honor  
13 says he can offer --

14 **THE COURT:** Of course, he's going to be limited. In  
15 the report he doesn't give -- does he give up -- does he say  
16 "at least" and then give some number? I don't think so.

17 **MR. PURCELL:** He just says "at least."

18 **THE COURT:** Then that's what he'll say at trial. And  
19 if he tries to go one inch beyond that and you object, I'll  
20 sustain the objection because you cannot do that.

21 Now, the problem is, again, though, on  
22 cross-examination if you open the door he can walk right  
23 through it and say things that are not in the report.

24 **MR. PURCELL:** The problem with "at least" is that it  
25 doesn't give any guidance to the jury. It gives the jury one

1 number, but then what does "at least" mean?

2           **THE COURT:** There are many situations where somebody  
3 is permitted to say "at least." They can have a lot of  
4 confidence that a number is at least X, and it could be higher.  
5 That happens all the time. What's wrong with that?

6           In other words, they're trying to be conservative.  
7 They say the number is at least X. And they have a lot of  
8 confidence that that number can't be attacked. So that's what  
9 they go with. But then on cross-examination they say, well, I  
10 guess if you test me on this, it could be higher. It could be  
11 2X.

12           But you're calling for a level of precision that I  
13 don't think the law does require that. So long as he doesn't  
14 go beyond what's in his report, then you have the tough choice  
15 how you're going to cross-examine him.

16           Believe me, if you ask the right question or the  
17 wrong question I'm going to let him say whatever he wants to  
18 say in response.

19           **MR. PURCELL:** Fair enough, Your Honor.

20           The group and value approach, if I can move on to  
21 that. It has to do -- again, we're talking about a very broad  
22 range here of three times, three and a half times as much  
23 damages at the high end versus the low end.

24           The problem that we see there is that the upper bound  
25 of the report depends on an assumption that the three patents

1 that Dr. Cockburn identified -- or, rather, the Oracle  
2 engineers identified as being in the top 22, that's the '104,  
3 the '205, and the '720 patents, are, in fact, the three most  
4 valuable patents in the entire Sun portfolio.

5 **THE COURT:** I'm sorry. Show me where this is in the  
6 report so I can -- it's kind of ringing true but -- is that  
7 paragraph 409?

8 **MR. PURCELL:** Your Honor, I'd have to look at the  
9 report. Again, this is something that was further fleshed out  
10 at deposition, I think.

11 **THE COURT:** I want to stick with what's in the report  
12 first, and then maybe we get into the deposition.

13 **MR. PURCELL:** Well, actually, Your Honor, paragraph  
14 409 makes my point, the point that I wanted to make, which is  
15 that there is no data to distinguish among the top 22 patents.  
16 And Dr. Cockburn concedes that. He said that the Oracle  
17 engineers basically told him, no, we can't break it down any  
18 further than that. All those 22 patents are roughly equally  
19 valuable.

20 When we asked the engineers about it at their  
21 depositions, they said: We have to do a lot of testing. We  
22 haven't done it, and I'm not even sure you could do it.

23 And so the lower bound of the report assumes,  
24 basically, that those 22 patents are equally valuable.

25 **THE COURT:** Where is the lower bound?

1           **MR. PURCELL:** The lower bound is the 17.7 million, I  
2 believe.

3           **THE COURT:** I need to see the report.

4           **MR. PURCELL:** All right.

5           **THE COURT:** I'm sure it's here somewhere.

6           **MR. PURCELL:** I think the easier place to find it  
7 probably is at the front of the report. And this would be on  
8 page 3, paragraph 5.

9           So the group and value approach on the patents leads  
10 to a range between 17.7 million and 57.1 million. So when I'm  
11 talking about the lower bound, I'm talking about the  
12 17.7 million.

13           **THE COURT:** I don't see on -- page 2?

14           **MR. PURCELL:** Page 3, Your Honor.

15           **THE COURT:** Page what?

16           **MR. PURCELL:** Page 3.

17           **THE COURT:** 3. All right.

18           **MR. PURCELL:** Sorry.

19           **THE COURT:** And then what paragraph do I look at?

20           **MR. PURCELL:** It's line 7 in the chart at the top of  
21 page 3.

22           **THE COURT:** All right. Adjust downward to limit  
23 damages to accused devices. 17.7 million to 57.1 million.

24           All right. I see that. Now, so what accounts for  
25 that range?

1           **MR. PURCELL:** Well, I don't believe this is really  
2 spelled out in the report, to be honest. And Oracle can  
3 correct me if I'm wrong.

4           The explanation we got at the deposition is that the  
5 lower bound would be an appropriate jury finding if the jury  
6 concludes that the top 22 patents are roughly equally valuable.

7           The upper bound would be an appropriate result if the  
8 jury concludes that the '104, '205, and '720 patents are the  
9 three most valuable patents in the portfolio.

10           And our argument here is that there is no support for  
11 the upper bound. The Oracle engineers have said, We can't  
12 offer any foundational testimony suggesting that there's any  
13 distinction in value among those patents. We just can't do it.

14           And Dr. Cockburn hasn't cited anything. There's  
15 nothing in the report that would support that conclusion.

16           **THE COURT:** All right. Wait a minute. I've got my  
17 own chart. I have -- I've got a different question. Number  
18 22. There were 22 groups, then there were 22 top patents.  
19 Those 22 22s have nothing to do with each other --

20           **MR. PURCELL:** Correct.

21           **THE COURT:** -- it's a coincidence.

22           **MR. PURCELL:** It's a coincidence.

23           **THE COURT:** This is a good trial point. You should  
24 never have that kind of coincidence. It's going to confuse the  
25 jury to no end. I spent hours trying to figure that out. You



1 should have 21 or 23. But to come out with 22, it just sounds  
2 like it's the same. I kept saying, it doesn't sound like it's  
3 the same, but why would it be 22? Do you see the point?

4 **MR. PURCELL:** I do.

5 **THE COURT:** All right.

6 **MR. PURCELL:** It's not our report.

7 (Laughter)

8 **THE COURT:** Then you've got this business of the 1s,  
9 2s and 3s.

10 **MR. PURCELL:** Right. So the top 22, the way that  
11 that was explained that those were selected, those are all of  
12 the patents that had a 1 ranking in the three most valuable  
13 technology groups.

14 So out of the 22 technology groups, you take the top  
15 three. And then any patent in those three groups that had a 1  
16 ranking is in that top range. And that added up to 22 total  
17 patents.

18 **THE COURT:** But, wait a second. I thought the -- all  
19 right. So the 22 top -- of the 22 top categories, there are  
20 three.

21 **MR. PURCELL:** Right. The 22 total categories they  
22 took the top three.

23 **THE COURT:** And then there were 22 patents that were  
24 ranked number 1 within those top three categories?

25 **MR. PURCELL:** Correct. And this actually is in the

1 report, Exhibit 33.

2           **THE COURT:** All right. I got that part now, but --  
3 so you're saying that the testimony is that those top three  
4 categories could not be distinguished among or ranked, I guess  
5 is the word, ranked by the engineers? Is that what you're  
6 saying?

7           **MR. PURCELL:** Correct. Dr. --

8           **THE COURT:** Read that testimony to me.

9           **MR. PURCELL:** I would need to go --

10          **THE COURT:** I asked you to come here prepared to do  
11 it. I wanted to hear the testimony without spin. So I --  
12 because if that's true, that's a very good point.

13          You find it. I don't want to interrupt you while you  
14 look for it.

15          **MR. PURCELL:** Okay. I have one cite for you. This  
16 is at paragraph -- page 105 of the Reinhold deposition. This  
17 is a direct quote. He said:

18               "A quantitative analysis that would somehow  
19 rank all of these patents in linear order  
20 from 1 to 569 is actually intellectually  
21 infeasible."

22          I would need to get the transcripts to read other --

23          **THE COURT:** Where did he limit his answer to the 22?

24          **MR. PURCELL:** I will need to get the transcript, Your  
25 Honor.

1           **THE COURT:** You said that they could not rank within  
2 the 22. That's what I want to hear.

3           **MR. PURCELL:** Your Honor, we can pull the transcript.  
4 I don't have it at the ready. This was admitted, though, both  
5 by Dr. Cockburn and the Oracle engineers. The testimony is  
6 unanimous on that.

7           **THE COURT:** Who is going to answer for Oracle on  
8 this?

9           Mr. Norton, I just want to hear one sentence. Do you  
10 agree with what counsel just said, that the top 22 could not be  
11 ranked within those top 22?

12           **MR. NORTON:** I have one sentence. The engineers  
13 could not distinguish between the top 22 patents based on their  
14 technical significance based on what they would have known in  
15 2006.

16           **THE COURT:** So if that's true, then why do you -- why  
17 don't you just assume they are all of average value of the top  
18 22?

19           **MR. NORTON:** Because their economic significance and  
20 their technical significance as known to engineers are two  
21 different propositions. And Professor Cockburn is an  
22 economist. Dr. Reinhold is a computer scientist.

23           So what the engineers did is they said, if we were  
24 sitting down with Google in spring of 2006, and we didn't know  
25 yet what Google was going to do, we just knew that we had a lot

1 of patents, which patents do we think would be most important  
2 to a smartphone platform along the lines of what Google said  
3 Android would be in 2006. And so with that information, these  
4 are 22 very important patents. And these would be ones that  
5 Google would want to have available to it as the result of the  
6 negotiation.

7           **THE COURT:** Isn't that the way it should be done,  
8 though? We're talking about apportioning a number that was in  
9 existence in 2006, to figure out how much of that was  
10 attributable to these particular patents. And the future had  
11 not yet unfolded.

12           **MR. NORTON:** Absolutely. That is the right way to do  
13 it, and that is why they did it that way. So then the question  
14 is, well, but is Professor Cockburn merely apportioning that  
15 original 2006 negotiation, or is he doing a hypothetical  
16 license negotiation under federal circuit law? And it's the  
17 latter.

18           So he now needs to make an adjustment. And the  
19 adjustment is disclosed in paragraph 410 of the report. And I  
20 have to -- Mr. Purcell said that Professor Cockburn says there  
21 is no data, which is a little unfair.

22           What Professor Cockburn says, in the absence of data  
23 you can't make a distinction. Then he goes on in paragraph 410  
24 and explains that we do know something. Right.

25           What we know is that Google chose to use the

1 technology that is comprised by these specific inventions. We  
2 know this because Professor Cockburn is a damages expert and  
3 he's going to take the stand at a point in which infringement  
4 and validity are established.

5 Now, if this were a case in which Google said, We  
6 closely examined the JAVA patents, and we tried to choose ones  
7 that weren't necessarily all that great, but at least we  
8 thought they were invalid or we thought we had to workaroud,  
9 you know, and it turns out we were wrong, but we didn't choose  
10 these because they were so great, we chose them because we  
11 thought we weren't infringing. But that is not the case.

12 The evidence in this case is that Google maintains  
13 that they didn't look at these patents. They didn't consider  
14 that. So what we know is Google designed Android in the way  
15 that Google thought best fit its business needs, its technical  
16 and business needs.

17 And when it made those decisions, what technology  
18 should we incorporate in Android -- it could have infringed any  
19 JAVA patent. They designed the Android however they want it.  
20 They could have infringed any of those 22. But they chose  
21 specific functionality to incorporate into Android that  
22 infringes those three patents in the top 22, not any of the  
23 others.

24 **THE COURT:** Doesn't that mean you're allocating more  
25 of the 2006 bundle to the ones that they turned out later, in

1 the future, to infringe as opposed to -- to me, that sounds  
2 like you're apportioning the original number, more of it, to  
3 the ones that happened to be infringed.

4 **MR. NORTON:** I think the better way to describe it  
5 is, no, there are two steps. The first is an apportionment  
6 step, which is in the 2006 negotiation in which Google would  
7 have obtained rights to a collection of patents -- and the  
8 collection of patents was never specified in the parties'  
9 negotiations. Right.

10 What they said was Google would get the rights to the  
11 Sun technology that it ultimately incorporates into Android and  
12 releases under an open source license. So they would have been  
13 able to choose the stuff they wanted, but they wouldn't have  
14 gotten everything. They just would have gotten the right to  
15 open source the things they actually used.

16 But what we're trying to do is apportion the value --  
17 Google is basically buying -- in 2006, they are buying a whole  
18 bunch of options. They are buying options to use a lot of  
19 different patents. And they are going to choose a smaller set.

20 So we are going to apportion the value of that bundle  
21 across the patents and other components. And when we do that,  
22 we see that these 22 patents and the patents in general are an  
23 important part of that bundle.

24 But then we have to do something different, right?  
25 Because Google didn't take that deal. Google said no to that

1 deal. Wanted to just go ahead on their own. And, instead,  
2 they infringed, we would say, five patents.

3 So focusing on the three that are in the top 22, now  
4 what Professor Cockburn has to do is say, if they had just been  
5 negotiating for those -- let's focus on the three in the top  
6 22 -- if they had just chosen those three to negotiate for, and  
7 said these are the ones we want, well, then that tells us that  
8 those three are the most important to Google.

9 We know that these are more important than the others  
10 because when Google decided how to design Android free from  
11 constraint -- we are just going to make Android the way we  
12 want -- they chose to incorporate this technology.

13 And there needs to be an adjustment made in the  
14 hypothetical negotiation to account for the fact that Google  
15 selected these inventions and not others. And that's described  
16 in paragraph 410 of the report.

17 In his deposition, Professor Cockburn used the term  
18 "revealed preference" to describe the same phenomenon. But  
19 that's what it is. It's Google's revealed preference. Their  
20 actions tell us what they thought was important. And what they  
21 thought was important is what is valuable.

22 So that is an additional piece of information that  
23 the engineers lacked for purposes of this apportionment  
24 analysis but that Professor Cockburn would be remiss to ignore.

25 And we also -- we know more, frankly. What the

1 engineers did was they said, well, based on our experience with  
2 JAVA and the technology described by these patents, what kind  
3 of benefit would we expect this patent to provide to a  
4 smartphone platform?

5 And if they thought it would provide a very  
6 substantial benefit based on their experience in order of  
7 magnitude over leaving it out, then they gave it a 1.

8 But that's what their expectation was. For the  
9 asserted patents, we know -- it's not guesswork. We now know,  
10 and Google would have known at the time of the hypothetical  
11 negotiation, that these particular patents are, in fact, very  
12 valuable to a smartphone platform, because at the time they  
13 commenced to infringe it would have been possible for them to  
14 conduct the same kinds of studies that JAVA engineers have  
15 conducted in this case, which show enormous benefits from using  
16 these patents.

17 So we know that these patents are not just patents  
18 that --

19 **THE COURT:** You said that the engineers could not --  
20 thought all 22 patents were important, and could not  
21 distinguish among them just based on the engineering, right?

22 **MR. NORTON:** I did say that, and that is correct.

23 **THE COURT:** So if we put ourself back in 2006, why  
24 would the Google engineers have been able to be more precise  
25 than your own engineers are now?



1           **MR. NORTON:** Well, because it's partly the artifice  
2 of the exercise and partly the limitations on what Sun/Oracle  
3 engineers know versus what Google engineers know.

4           So the exercise the engineers did was, if we were  
5 looking at this in 2006, which patents would you expect to be  
6 valuable based on the product requirements document and the  
7 other information Google gave Sun back at that time?

8           So not knowing as much as Google, in fact, knew.  
9 Because -- and not even knowing as much what Professor Cockburn  
10 knows because we have a protective order in this case and I  
11 can't show Sun engineers, those JAVA engineers, all the  
12 internal documents from Google which explain precisely what  
13 Google was going to do.

14           **THE COURT:** But do you have 2006 e-mails and  
15 documents that reveal that these three patents were going to be  
16 the ones that they were likely to infringe?

17           **MR. NORTON:** These three patents, no. I don't have  
18 that and don't need that.

19           What I have is the internal documents and the  
20 documents that they actually gave to Sun that say, this is,  
21 basically, what Android is going to look like.

22           **THE COURT:** What year is that?

23           **MR. NORTON:** 2006. Because they provided a document  
24 called the "product requirements document," which they gave it  
25 to Sun. And it sketched out, and here are the things that

1 Android will have, and here is how we want to do it, and this  
2 is what the virtual machine will look like, the JAVA virtual  
3 machine, and these are the things we need you to do. And it  
4 spelled it out.

5 And there were discussions, and then people at Sun  
6 began to create work plans for, How do we to do our part of  
7 this job? What will we need to contribute? How many engineers  
8 will we need? And so on.

9 So the engineers looked over those documents and  
10 said, okay, we have a sense now for back in 2006 what everybody  
11 was thinking about. And that helps us identify which groups of  
12 technology, those 22, would have been relevant, and which  
13 particular patents would have risen to the top in the parties'  
14 discussions. But we don't have enough information to say, oh,  
15 they would have used, you know-- for boot, they would have  
16 chosen these particular patents. They would have used our  
17 in-class technology as opposed to some other technology. They  
18 would have had choices. And the engineers weren't able to say,  
19 we could predict, based on what we know, we the engineers know,  
20 what Google would do.

21 **THE COURT:** But are there e-mails internal to Google  
22 from 2006 that were not provided to Oracle at that time, but  
23 which zero in on these three patents or the technology that  
24 were internal to Google, which would lead us to believe that  
25 even at the time of the hypothetical negotiation Google knew

1 good and well these are the three patents it was going to  
2 infringe or it was going to need?

3 **MR. NORTON:** Not in the way Your Honor phrased it,  
4 because there's -- there are no documents in which Google says,  
5 We are going to infringe the '104.

6 **THE COURT:** Or that, We need this technology.

7 **MR. NORTON:** What I would say -- but I would answer  
8 Your Honor's question yes, in this sense. There are the  
9 documents that have been analyzed by the technical experts,  
10 which show that by 2006 Google had begun to infringe.

11 So, Google had chosen this technology by 2006. They  
12 had built it into Android. And that's why they're infringing.  
13 So the -- there are e-mails that say, we need --

14 **THE COURT:** 2006 they were infringing, is that  
15 your --

16 **MR. NORTON:** It is not the same for every patent  
17 but -- and I can't --

18 **THE COURT:** These three, were they infringing these  
19 three?

20 **MR. NORTON:** Not all of these three. But I believe  
21 by 2006 they had already begun to infringe the '104.

22 This is not an issue that is in dispute between the  
23 damages experts in the sense that Professor Cockburn has a  
24 hypothetical negotiation in spring of 2006, and Google doesn't  
25 contest that that is the date on which the negotiations take

1 place; although, their experts do assume that Google waited  
2 until longer to infringe some patents. But, there was  
3 infringement as early as 2006.

4 So we do have documents from Google at the time that  
5 they begin to infringe, that, of course, show that they chose  
6 this particular technology to incorporate in Android. That's  
7 how they infringe.

8 **THE COURT:** I've got to let the other side respond.  
9 Thank you.

10 What do you say to that over there, Mr. Purcell, that  
11 the -- in the hypothetical negotiation, yes, it's true that the  
12 engineers can only give a broader, more crude group of 22, but  
13 that Google going into those negotiations would have had better  
14 information as to the ones that it needed, and that it's  
15 reasonable to presume that it would have known that it needed  
16 the ones it was about to infringe? What's wrong with that  
17 analysis?

18 **MR. PURCELL:** Well, all they have to go on is this  
19 product requirements document which shows Google's expectation,  
20 which doesn't say anything about specific patents. It doesn't  
21 say anything about specific functionalities. It talks about  
22 the general structure of what Android would be.

23 And, really, their argument is circular. Their  
24 argument is that the three most valuable patents are three of  
25 the patents that they chose to accuse Google of infringing in

1 this case. But if you want to talk about revealed preference,  
2 this case, as Your Honor knows, originally involved seven  
3 patents. Four of those seven aren't in the top 22. One of  
4 them, the '520, which is still in the case, is somewhere down  
5 around number 100 among the 569.

6 So it's obviously not the case and can't be the case  
7 that you can just look at what Oracle alleges Google has done  
8 in the way of infringement, and infer from that that you've got  
9 the most valuable patents.

10 **THE COURT:** But you don't want to argue to the jury  
11 that you infringe even more and, therefore, your logic is not  
12 right. That would mean you owe more money, not less money.

13 **MR. PURCELL:** Well, we obviously don't plan to argue  
14 to the jury that we infringe the patents we have been accused  
15 of infringing.

16 But even using Oracle's logic, which is that the  
17 patents that they've accused us of infringing are necessarily  
18 the most valuable to Google because they reveal Google's  
19 preference, their own damages report doesn't support that.

20 **THE COURT:** But you deny you infringe anything. So  
21 those accusations just cancel each other out.

22 **MR. PURCELL:** That's my point, Your Honor. Their  
23 argument is based on the patents they have chose to infringe.  
24 So I don't think it has any probative value at all, this  
25 business of revealed preference.

1           **THE COURT:** But if they prove that you infringe those  
2 three -- that's the assumption we have here. We don't get to  
3 damages otherwise.

4           If they prove that these three have been infringed,  
5 then why isn't it a reasonable assumption to presume that the  
6 negotiator in 2006, from Google, would have known that in due  
7 course Google was going to need a license for those three  
8 patents; and, therefore, be willing to pay a little more for  
9 those three patents than for the others?

10           **MR. PURCELL:** There are a couple of reasons why.  
11 Number one is that I believe one of the top three -- I think  
12 it's the '720 didn't even exist, wasn't issued until 2008. So  
13 it wasn't in a fact at the time of the hypothetical  
14 negotiation.

15           **THE COURT:** I didn't know that. Say that again.

16           **MR. PURCELL:** I believe the '720 Patent wasn't issued  
17 until 2008.

18           **THE COURT:** How could there be infringement of that  
19 until it's issued? Right?

20           **MR. PURCELL:** There isn't. Both experts have assumed  
21 that the proper date for the hypothetical negotiation was in  
22 2006 when --

23           **THE COURT:** That's what you wanted. Please don't  
24 back up. The other side was willing to go with a much later  
25 date, and you argued for 2006. Right?

1           **MR. PURCELL:** That was the date of first infringement  
2 of one of the patents.

3           **THE COURT:** So if you want to push the date back so  
4 that -- I'm pretty sure you don't want to do that, but if you  
5 want to push the date of the hypothetical negotiation back,  
6 we'll reopen that subject.

7           **MR. PURCELL:** There are a bunch of different ways  
8 that Google could have gone in 2006. There are a bunch of  
9 different paths that it could have taken. There's not any  
10 evidence that suggests that Google, at the time of the  
11 hypothetical negotiation, focused on these specific patents or  
12 this specific technology.

13           **THE COURT:** Maybe the way to deal with this problem  
14 is for your experts -- not experts, but your real witnesses,  
15 instead of these hired gun experts, your real witnesses will  
16 come in and say, I was there at the time. We didn't even think  
17 about this. We could have designed around all of these  
18 problems.

19           **MR. PURCELL:** And there will be testimony to that  
20 effect.

21           **THE COURT:** The e-mail that Mr. Reinhold came up with  
22 will be quite important, at that point.

23           **MR. PURCELL:** Well, remember that was in 2010. That  
24 was many years later. That was after a lock-in.

25           **THE COURT:** All right. You can maybe make that point

1 to the jury.

2 **MR. PURCELL:** We will. We will.

3 The other thing that I should mention regarding the  
4 2006 time frame it -- well, actually, Your Honor, unless you  
5 have any specific questions I think I'll stop there.

6 **THE COURT:** All right. What is your next objection  
7 to the report?

8 **MR. PURCELL:** Our next --

9 **THE COURT:** My court reporter is looking at me like I  
10 need to take a break. It's time for a break so the court  
11 reporter's fingers can rest.

12 You be thinking about what your next point is going  
13 to be, and then alert the other side so they can be thinking,  
14 too.

15 We'll take 15 minutes.

16 **MR. NORTON:** Your Honor, one question. Your Honor  
17 asked me to respond to particular points in Mr. Purcell's  
18 presentation, but not to its entirety. And he has made  
19 arguments that I have not yet had a chance to respond to.

20 **THE COURT:** We're going to move on to the next point  
21 anyway.

22 **MR. NORTON:** Thank you, Your Honor.

23 **THE COURT:** Save it for the end of the hearing.

24 (Recess taken from 9:10 to 9:28 a.m.)

25 **THE COURT:** Let's go back to work. Please be seated.



1           What, Mr. Purcell, is your next objection?

2           **MR. PURCELL:** So given the comprehensiveness of the  
3           briefs, I really think there is only one other issue I want to  
4           raise this morning.

5           **THE COURT:** All right. What's that?

6           **MR. PURCELL:** Which has to do with the conjoint  
7           survey that Dr. Shugan did.

8           **THE COURT:** Okay.

9           **MR. PURCELL:** And we've got four objections to that.  
10           Number one is, this is just not a tool for estimating  
11           damages in litigation. There is not case law that approves it.  
12           We pointed that out in our brief.

13           Oracle responded with a declaration from Dr. Shugan  
14           that's multiple hearsay, where he refers to other industry  
15           professionals who purport to opine that conjoint surveys were  
16           used for some purpose in other cases.

17           We don't have orders --

18           **THE COURT:** But there have been surveys in other  
19           cases.

20           **MR. PURCELL:** Consumer surveys, yes.

21           **THE COURT:** That's what this is, isn't it?

22           **MR. PURCELL:** Well, there's a big difference, Your  
23           Honor, between doing a survey about confusion in the context of  
24           a trademark case or surveys about reliance in the context of a  
25           consumer fraud case, and this sort of conjoint survey, which

1 purports to map consumer preferences about features to  
2 reduction in market share for purposes of estimating damages.

3 Conjoint surveys are market research tools that are  
4 commonly used when companies are designing new products. They  
5 are not mathematically precise tools that are used to estimate  
6 damages.

7 And there isn't any example we've been able to find  
8 in the case law of a court saying, yes, you can use conjoint to  
9 map damages in a case like this; or in any case, for that  
10 matter.

11 And the only point I wanted to make on that is that  
12 Oracle's only response was to say that Dr. Shugan has been  
13 informed by other people that conjoint surveys were used in  
14 other cases. That's completely inchoate. We don't know what  
15 those cases were. We don't have orders. We don't have  
16 transcripts.

17 The second point I wanted to make is that  
18 Dr. Shugan's methodology disproves itself. It proves that it  
19 is not sound, just looking at the results that he received.

20 The purpose of a conjoint analysis is to test the  
21 value of individual features by varying those features, and it  
22 relies on an assumption that the respondent, as that one  
23 feature is varying, is able to hold all other features of the  
24 product constant.

25 So everything else equal, if you reduce the

1 application load time, if you increase the application load  
2 time, how would the consumer preference be affected?

3 And what Dr. Shugan's results show is that consumers  
4 in his survey weren't holding all other features constant.  
5 They were implying all sorts of other features that varied  
6 depending on what they were looking at.

7 And the reason we know this is because 24 percent of  
8 respondents in his survey said that they would either prefer or  
9 be ambivalent, be indifferent, between a more expensive phone  
10 as compared to a cheaper phone, all other features constant.

11 So 24 percent say they would rather buy a \$200  
12 smartphone instead of a \$100 smartphone, all other features  
13 constant. That obviously makes no sense.

14 **THE COURT:** What percentage said that?

15 **MR. PURCELL:** 24 percent.

16 **THE COURT:** So 24 percent said, we're indifferent as  
17 to spending a hundred dollars more for the same item?

18 **MR. PURCELL:** They were either indifferent or they  
19 preferred to spend the extra hundred dollars. So either they  
20 are completely irrational or they were inferring that the more  
21 expensive phone had some additional feature that made it worth  
22 the money. And we don't know. So, that's point two.

23 Points three and four are illustrated on the fourth  
24 and fifth pages, the last two pages of the handout that we  
25 passed up to Your Honor earlier.

1           The fourth page, next to last page, is a list of all  
2 of the features that the focus group that Dr. Shugan's  
3 assistant conducted prior to the actual conjoint survey  
4 these -- these are all of the features that respondents in that  
5 focus group mentioned as potentially bearing on their decision.  
6 There's 39 of them.

7           Dr. Shugan selected seven of these. He ignored the  
8 other 32. Among the ones he ignored and didn't test for are  
9 things that are obviously important to consumers, like network.  
10 Do you have Verizon? Do you have AT&T? What's the coverage  
11 like in your area?

12           **THE COURT:** If it's highlighted, that means he -- I  
13 don't understand your code here.

14           **MR. PURCELL:** Your Honor, could I approach? My copy  
15 actually doesn't have highlighting on it.

16           **THE COURT:** Why did you give me one that has  
17 highlighting?

18           (Laughter)

19           **MR. PURCELL:** That's a good question.

20           **THE COURT:** Here. Give me the one you want me to  
21 see, and I'll let you just have that copy back.

22           **MR. PURCELL:** Oh, no, I'm sorry. It's not  
23 highlighted. It's just for readability, some of the rows are  
24 gray and some are white.

25           **THE COURT:** But which ones are -- I thought you were

1 highlighting the ones that got ignored, or something.

2           **MR. PURCELL:** No, Your Honor. It's not indicated on  
3 there. These are the totality of the features the focus group  
4 pointed to.

5           Dr. Shugan selected seven of these. Among them:  
6 Price, screen size, operating system. I believe application  
7 startup time, availability of applications --

8           **THE COURT:** Help me -- all right. So I got -- so  
9 this list is the full list of features that focus groups talked  
10 about --

11           **MR. PURCELL:** Correct.

12           **THE COURT:** -- correct? All right.

13           **MR. PURCELL:** Of which --

14           **THE COURT:** Of which what?

15           **MR. PURCELL:** Of which he selected seven.

16           **THE COURT:** Which seven did he select?

17           **MR. PURCELL:** He selected application startup time.

18           **THE COURT:** Where is that on here?

19           **MR. PURCELL:** It's the third one in the first column.

20           **THE COURT:** Okay.

21           **MR. PURCELL:** Availability of applications.

22           **THE COURT:** Yes.

23           **MR. PURCELL:** And then if you go to the next column,  
24 he selected multitasking.

25           **THE COURT:** Yes.

1           **MR. PURCELL:** He selected operating system.

2           **THE COURT:** Uh-huh.

3           **MR. PURCELL:** He selected price.

4           **THE COURT:** Yes.

5           **MR. PURCELL:** He selected screen size.

6           **THE COURT:** Okay.

7           **MR. PURCELL:** And there's one other that escapes me  
8 right now.

9           **THE COURT:** All right. I don't know either. So --

10          **MR. PURCELL:** So there's 32 that he did not select.

11 And he didn't have any data, that people in the focus group  
12 didn't tell him, well, these seven are more important than the  
13 other 32.

14          **THE COURT:** How about availability of wifi?

15          **MR. PURCELL:** He didn't select availability of wifi.  
16 He didn't select the brand of the handset itself, whether it's  
17 a Motorola or Samsung, except to the extent that's captured in  
18 operating system, because, obviously, only Apple makes the  
19 iPhone.

20               He didn't select carrier. As I said, network,  
21 whether it's Verizon or AT&T.

22          **THE COURT:** Won't his answer to that be, well, I  
23 can't select those because the patents that are infringed don't  
24 have anything to do with those features?

25          **MR. PURCELL:** That may well be his answer. But,

1 again, if you're trying to measure the way consumers actually  
2 view the importance of certain features, you can't narrow it  
3 down. You can't cull it down just to the features that are  
4 important to the litigation.

5 **THE COURT:** Well, why not? Why is that?

6 **MR. PURCELL:** Well, because you're putting your thumb  
7 on the scale in a very serious way, Your Honor. That renders  
8 the methodology itself unreliable because you are removing  
9 anything that would suggest that these patents are, in fact,  
10 less valuable because consumers don't care as much about them,  
11 and you're including only the features that implicate the  
12 patents, which are going to inflate the value of the patents.  
13 A consumer may very well care about network, may very well care  
14 about, Do I get coverage?

15 Maybe they live in a rural area, and they may care  
16 less about availability of applications because they just don't  
17 do that. And, yet, they are not given the option in the  
18 conjoint of stating a preference for network as opposed to  
19 availability of applications.

20 **THE COURT:** Let me give you an example. Take  
21 something simpler than that. Say somebody had a patent on a  
22 radio, car with radio.

23 **MR. PURCELL:** Okay.

24 **THE COURT:** Okay. Car with radio. And along comes a  
25 company that builds a car with a radio and infringes the

1 patent. So somebody then does a conjoint study that asks the  
2 question, would you like to have a car with a radio or a car  
3 without a radio? You would be in here criticizing they didn't  
4 ask about what kind of tires are they going to put on the car.

5 In other words, you're raising issues that don't have  
6 anything to do with what's being litigated.

7 **MR. PURCELL:** Well, because without a radio or a car  
8 with a radio, I would imagine a hundred percent of people are  
9 going to say a car with a radio. It's an extra feature.

10 And this is exactly -- we cited a quote from Judge  
11 Posner, in the Apple-Microsoft case, recently, who rejected a  
12 consumer survey on exactly this ground.

13 He said, basically, are you telling me that any  
14 consumer is going to say if you have a choice between a product  
15 and a product plus, that they are not going to choose the  
16 product plus? Of course, they will; that's meaningless.

17 So here --

18 **THE COURT:** What if it was a car with a radio, but  
19 car without radio and instead you paid a hundred dollars less?  
20 So, in other words, there is a real choice there.

21 But my point is, you're asking them to compare  
22 features like what kind of tires are on the car, and trade that  
23 off. And maybe that's what the law requires, but --

24 **MR. PURCELL:** I think it's what logic requires in the  
25 sense that, again, the product that Dr. Shugan is testing is a



1 smartphone. A smartphone is a device with a whole bunch of  
2 features. All of those features may have some impact on  
3 whether a consumer buys one phone over another.

4 Those features include things like network, include  
5 things like availability of wifi, include things like who made  
6 the handset, how attractive is it, what's the styling like?  
7 None of that stuff was tested by Dr. Shugan. He focused only  
8 on a few, narrow features.

9 **THE COURT:** What was the respondent survey group  
10 asked to assume with respect to, say, wifi?

11 **MR. PURCELL:** They were asked to assume -- nothing in  
12 particular, just that it was constant among all smartphones.  
13 So we don't know what --

14 **THE COURT:** Let's -- well, if they were asked to  
15 assume that it was constant among all options, why wasn't that  
16 the right assumption to make, since the -- allegedly, the  
17 infringing features are the ones that they did ask about? You  
18 see what I'm getting at?

19 **MR. PURCELL:** I do.

20 **THE COURT:** Why do you have to ask about all the  
21 things that are not in controversy?

22 **MR. PURCELL:** Well, there's a couple of reasons.  
23 Number one is because you don't know to what extent a  
24 consumer's preference is driven by those other features as  
25 opposed to the features that are tested.

1           Now, I'm not saying and I don't think we would  
2 contend or the law requires them to test every conceivable  
3 feature. What Dr. Shugan could have done is figure out which  
4 features are more important to consumers by doing a different  
5 test, and then testing that set of features. He didn't do  
6 that. He didn't ask any of those questions in the focus group.

7           The only thing he did was self-select. And, as we  
8 pointed out in our report, actually, some of the features that  
9 he selected were dictated to him by Dr. Cockburn or  
10 Dr. Cockburn's assistant.

11           But leaving that aside, he selected seven features  
12 with relevance to the litigation. Well, not all of them. I  
13 mean, a couple of them, like price, I'll concede aren't  
14 specifically just relevant to the litigation. But then he  
15 excluded a bunch of other things that are obviously relevant to  
16 a consumer-purchasing decision, without any basis for that.

17           So he doesn't have to test everything. But he has to  
18 have some basis for selecting the features that he did, other  
19 than they're useful to the litigation, because there may be  
20 things that --

21           **THE COURT:** Well, not just useful. They are the  
22 features that are enabled by the patents-in-suit.

23           **MR. PURCELL:** I agree that it was appropriate for him  
24 to test those. He absolutely should have.

25           But what he should also have done was test other

1 features that may be equally important to consumers, or more  
2 so, along with the features that are at issue in the  
3 litigation. Because what he's purporting to demonstrate is  
4 that if these features that are relevant to the case were  
5 disabled or if they were less robust, that consumers would stop  
6 buying Android, and they would stop buying it in certain  
7 percentages.

8           So, we really don't know, based on his consumer  
9 preference shares, whether he's accurately measuring anything,  
10 because he's excluded a whole bunch of other things that may  
11 actually be more important to consumers than the things he  
12 tested.

13           **THE COURT:** Wouldn't they still be more important  
14 under all of these scenarios that they were testing? Let's say  
15 wifi is extremely important. It would be extremely important  
16 under every option. So how would that get somehow traded off  
17 on the respondents' answers?

18           **MR. PURCELL:** Well, we also know that the respondents  
19 did not hold all other features constant because of the problem  
20 I explained before, where you have 24 percent, almost a quarter  
21 of the respondents saying they would rather pay an extra  
22 hundred dollars.

23           **THE COURT:** That's the problem of maybe the  
24 instructions weren't clear enough, or the way it was  
25 administered it wasn't clear enough. That's a troubling point.

1 I agree with that. But that's different from which features  
2 they were asked to test.

3 Let's be clear. Go back to the 24 percent. Is that  
4 just some number that you kind of glued together, or is that a  
5 conceded defect?

6 **MR. PURCELL:** I believe it is conceded in Dr.  
7 Shugan's reply declaration. Rather, his declaration in support  
8 of Oracle's opposition.

9 And in Oracle's opposition, Dr. Shugan said that  
10 24 percent of survey respondents were either agnostic between  
11 the hundred dollar and the \$200 phone, or they preferred the  
12 \$200 phone all other features being equal. I think the number  
13 he gave is actually affirmatively preferring the \$200 phone was  
14 8.8 percent.

15 **THE COURT:** So it was clear that -- in other words,  
16 if they had followed the instructions, was it clear that the  
17 phone that they were opting for would cost a hundred dollars  
18 more without any more features?

19 **MR. PURCELL:** Yes. The price was specified. And  
20 they were instructed to hold all other features constant. So  
21 they were supposed to focus only on the features that were in  
22 dispute, and assume that the phones were identical in all other  
23 respects.

24 **THE COURT:** Did anyone do -- I don't even know if  
25 this is possible, but sometimes what they do is they throw out

1 everyone who has an irrational -- let's say you throw out that  
2 24 percent and then did a survey just of the 76 percent that  
3 were left over. Did anyone do that to see how that -- how  
4 those numbers would come out?

5 **MR. PURCELL:** I think Dr. Shugan did try to  
6 rehabilitate his analysis, after we criticized it, by doing  
7 that.

8 It doesn't solve the fundamental problem, which is  
9 that you have a survey that's designed so that 24 percent of  
10 respondents are giving completely irrational answers. How can  
11 the methodology be sound --

12 **THE COURT:** That may be, but when he rehabilitated,  
13 did the answers and percentages change or did they stay the  
14 same?

15 **MR. PURCELL:** I would have to leave it to Oracle's  
16 counsel to address that.

17 **THE COURT:** What's your next criticism of the  
18 conjoint --

19 **MR. PURCELL:** The final criticism has to do with a  
20 question Your Honor asked -- and this is addressed on the last  
21 slide in our packet -- which was about confidence intervals.

22 So, initially, Dr. Shugan did not calculate  
23 confidence intervals. And when I asked him the series of  
24 questions that's on slide 5 of the deposition, he said that it  
25 wasn't possible to do it because he was using a Bayesian

1 estimation, and it was not possible to calculate confidence  
2 intervals using that.

3           And then in Dr. Leonard's report -- and this is his  
4 initial report, not the recent supplemental report -- at page  
5 116, Dr. Leonard pointed out that, in fact, Dr. Shugan was  
6 wrong; that there was a way of calculating, essentially,  
7 confidence intervals using a Bayesian estimation. This is the  
8 Bernstein-Von Mises theorem, which I don't purport to  
9 understand.

10           And, lo and behold, in the slides that Oracle  
11 prepared for today and Your Honor has in your smaller binder,  
12 Dr. Shugan has submitted binders that do purport to have  
13 confidence intervals in them.

14           We haven't had an opportunity to test them. We saw  
15 them for the first time around 5 o'clock last night.

16           **THE COURT:** What tab is that?

17           **MR. PURCELL:** That I don't know.

18           I believe it's 8, Your Honor.

19           **THE COURT:** Okay. All right. Let's hear from the  
20 other side on this, these points from conjoint only.

21           **MR. NORTON:** Thank you, Your Honor.

22           So, I'll try to address Mr. Purcell's points in the  
23 sequence in which he made them. His first argument is that  
24 conjoint is not appropriate for the calculation of damages.

25           That is nonsense.

1 First, Google's copyright expert in this case,  
2 Dr. Alan Cox -- and we cite this in our papers -- has twice  
3 written articles in which he says that choice modeling, which  
4 is conjoint, is an appropriate way to calculate damages in  
5 infringement cases.

6 And when Google tells you that they are aware of no  
7 case in which conjoint analysis has been used to calculate  
8 damages, they can only say that by not reading the articles  
9 that their own expert has published. And those are attached as  
10 exhibits I and J to the Norton declaration in support of the  
11 opposition that we filed on the Daubert.

12 And what Dr. Cox said, in the article attached to  
13 Exhibit I, is that choice modeling -- this was in 2003 -- is a  
14 relatively new technique, but it was used to good effect in an  
15 infringement suit brought in the mid '90s. And which he then  
16 proceeds to describe the lawsuit in which the plaintiff proved  
17 its damages by using choice modeling which, again, is conjoint  
18 analysis. And he goes on to explain how choice modeling works  
19 and how it presents the consumer with a series of choices and a  
20 study that is, in all material respects, identical to the type  
21 of study that Professor Shugan did.

22 Exhibit J is the abstract of an article which is  
23 available on the Internet and is cited in our brief. And that  
24 is an article by Dr. Cox, Google's copyright damages expert,  
25 titled, "Survey Techniques for Rigorous Measurement of Damages

1 in Trade Dress Confusion Cases," in which he goes on to explain  
2 that choice modeling is a rigorous measurement of damages in  
3 infringement cases.

4 Dr. Shugan is a person who is familiar with the  
5 literature, cited a number of cases by name, in which conjoint  
6 analysis has been used. It's used over and over again.

7 But even if Google were right that it had not been  
8 used specifically to calculate damages, *Lucent* tells us that  
9 it's appropriate, for the purpose of doing a hypothetical  
10 negotiation, to look at survey data that would have been  
11 available to the parties at the time of the negotiation.

12 And this is the type of survey that they could have  
13 done. And it's used in the way -- and the way in which  
14 Professor Cockburn uses it is similar to the way in which  
15 parties in a negotiation could have used it. That is, how  
16 important is it to our smartphone that applications load  
17 quickly? How important is it to have lots of applications  
18 available? Which things are more important to consumers?  
19 Where should we really spend our time?

20 And the conjoint analysis tells you which features  
21 consumers think are important, and it's appropriate to consider  
22 that under *Lucent*.

23 **THE COURT:** Which of the seven things measured  
24 copyright as opposed to measured the hardware part?

25 **MR. NORTON:** It is the availability of applications.



1 And the argument is thus: The reason why it was important to  
2 Google to have the API specifications, the API packages that  
3 they infringed, was that they are familiar to carriers. But,  
4 also, they are familiar to programmers.

5 And if you wanted to be able to quickly get a large  
6 number of applications available for your smartphone platform,  
7 it would be very important to have an established developer  
8 base that is already familiar with your programming language  
9 and the APIs that it requires.

10 And so Google --

11 **THE COURT:** Not the programming language, because  
12 that's -- you've already conceded that away in this case. But  
13 the APIs, is what you're claiming.

14 **MR. NORTON:** That's right. Because Dr. Astrachan,  
15 who is Google's copyright expert, says that the APIs are  
16 essential to -- practically required, he says -- if you're  
17 going to be writing applications in the JAVA language.

18 The JAVA language is free to use, but the APIs are  
19 copyrighted. And when Google incorporates the APIs into the  
20 Android platform, it infringes. It wants to do that because  
21 the programmers are looking for those APIs. They don't want  
22 different APIs. They don't want to be confused with some new  
23 set of APIs, even if they are written in the JAVA language.

24 So Google decided, we're going to use this collection  
25 of specifications, this hierarchy of specifications, these

1 interrelationships between APIs, because these are the ones  
2 that the millions of JAVA developers expect to see.

3 And they did that because if they didn't do that, if  
4 they went with some other language -- which they thought about  
5 and rejected -- if they went with some other language they  
6 wouldn't have a developer base.

7 **THE COURT:** All right. So in the study that was done  
8 here, how did the availability of applications feature rank  
9 among consumers?

10 **MR. NORTON:** So, Professor Shugan calculates how many  
11 consumers would switch in the event that the number of  
12 applications available on the phone were lower.

13 So what he used was around the time of -- I believe  
14 he used 2010 as the example, the number of applications that  
15 were available on the Palm platform, the Blackberry platform  
16 and the iPhone platform as the choice sets.

17 So 6,000 -- when you're presented with the phone  
18 choices, there's a phone that has available to it 6,000  
19 applications, 40,000 applications, or a hundred thousand  
20 applications. And how does that affect consumers' choices?

21 And then he's able to determine the relative  
22 importance of an application universe to consumers' choices on  
23 a smartphone relative to all the other features. And then he's  
24 able to calculate the effect on Android market share as a  
25 result of the inability to provide a robust application

1 universe like that. And that --

2           **THE COURT:** The way in which you use this is one step  
3 removed from all of that. Somehow it's used to allocate the  
4 original 2006 bundle, by this assumption or conclusion that the  
5 copyright API part was worth one half of the patent part,  
6 right?

7           **MR. NORTON:** That is one of the ways in which it is  
8 used. Let me explain that.

9           **THE COURT:** All right.

10           **MR. NORTON:** It's -- it seems like a fairly simple  
11 syllogism to me. One of the key virtues or benefits of the  
12 copyrighted APIs that are infringed is that they provide  
13 applications, as I just discussed. One of the key benefits of  
14 the patents-in-suit is that they provide speed, memory,  
15 performance benefits on the smartphone.

16           And those speed benefits have been measured by the  
17 technical experts. And so we know from the work done by the  
18 technical experts that if you -- by virtue of Google using  
19 these patents, it has improved the performance of the phones by  
20 a certain amount.

21           When Dr. Shugan did his conjoint study, he used that  
22 incremental benefit. So how important is that incremental  
23 benefit that we attribute to the patents, the performance  
24 benefit? How importance is that performance benefit to the  
25 consumers relative to the value of the applications to

1 consumers?

2 And so what we know then is consumers value the  
3 incremental speed at about twice what they value the  
4 incremental applications.

5 So that tells us that the patents-in-suit, the speed  
6 provided by the patents-in-suit, is twice as helpful to your  
7 smartphone as to the applications enabled by the copyrights in  
8 suit.

9 So by valuing those two attributes relative to one  
10 another, you can apportion the 2006 bundle. So that's the way  
11 in which it's used there, is that we know the relative  
12 importance of these two things. An observation which is true  
13 even if every argument that Mr. Purcell made were correct about  
14 the failure to select features.

15 Now, Dr. Shugan has explained why that argument is  
16 completely wrong, and I'm more than ready to address it. But  
17 even if that were true, if all you want to know is the relative  
18 value of those two features, then this conjoint would be more  
19 than adequate to do that, even taking into consideration, even  
20 crediting Google's objections. So that's how it's used for the  
21 allocation process.

22 Professor Cockburn uses it for a second purpose,  
23 which is that the conjoint survey establishes that the speed  
24 benefits that are provided by these particular patents, and the  
25 application benefits provided by these particular copyrights,

1 are important to consumers.

2           And Dr. Shugan has actually measured, in terms of  
3 market share, just how important they are. But what  
4 Dr. Cockburn is able to do from that is he can say, well, in  
5 addition to all the other evidence I have considered, I've  
6 considered the results of the conjoint, which tell us the  
7 unsurprising fact -- but still verified by data -- that making  
8 the phone perform more quickly makes a difference in terms of  
9 sales, and having lots more applications makes a difference in  
10 terms of sales. And the conjoint confirms that.

11           That is something that, for example, Judge Rader, in  
12 the Cornell-HP case, said was an important thing for the  
13 plaintiff to put forward. You just don't come in and say,  
14 well, you know, it's important. Consumers like it. You know,  
15 everybody always assumed that consumers liked it.

16           Where are the demand curves? Where is the consumer  
17 survey? Where is something that tells me that people really do  
18 value it?

19           So Professor Cockburn has that additional data point  
20 that tells him that not only did Google think it was important,  
21 so did consumers. And that's what the parties would have  
22 thought at the time of their negotiation.

23           So those are the two ways in which the conjoint is  
24 used to inform Professor Cockburn's calculations in this case.  
25 And that is entirely appropriate, both as an apportionment

1 exercise -- it's a good way to apportion between the value of  
2 the copyrights and the value of the asserted patents. It's  
3 also a good way to determine the consumer demand for these  
4 particular attributes.

5           So turning to chart 4, that Google submitted today,  
6 these are the features, of course -- this is Professor Shugan's  
7 own slide. It's his own exhibit. And these are the things  
8 that in the focus group people mentioned.

9           Now, in a conjoint -- I don't believe this is  
10 contested in any way. In a conjoint -- the beauty of a  
11 conjoint analysis is that you do not need to test every  
12 feature. If you had to test every feature, it would be very  
13 burdensome, and it wouldn't be particularly useful. And, in  
14 fact, that's not required. And that's why companies use it,  
15 the government uses, it's used in litigation, because you can  
16 isolate a few features that you care about and only test those.

17           And, so, in his declaration, submitted in support of  
18 our opposition brief, at paragraph 25, paragraph 25,  
19 Professor Shugan responds directly to this criticism. He says,  
20 "Importantly, it is not necessary in conjoint analysis to test  
21 every feature that may matter to consumers because conjoint  
22 analysis assesses relative" -- in bold italics by  
23 Professor Shugan -- "relative importance."

24           Nonetheless, he explains, he did include features in  
25 the survey that are not at issue in the litigation, and he

1 explains why. Quote, I took this additional step to estimate a  
2 well-specified model.

3 Goes on to say, quote, This approach is  
4 methodologically sound, as I included the two most critical  
5 features that generally derive the greatest value in any  
6 estimation and that captured the benefits of Google's  
7 reputation." Those additional two are the operating system,  
8 which is called Android, and so it incorporates Google's brand  
9 value, and price.

10 Now, what's important in conjoint analysis is not  
11 that you test every feature, but that you make sure to include  
12 among the most important features as Professor Shugan has  
13 explained. So he's got price and he's got the operating  
14 system. And in his study those are the most important features  
15 by a substantial margin.

16 The operating system is considerably more important  
17 in consumers' decision than the number of apps. It's more  
18 important than the incremental speed benefits that we claim are  
19 provided by the patents. Price is also more important. But  
20 he's included those. And he doesn't need to test everything.  
21 That's not how you do a conjoint analysis. He says so in his  
22 declaration.

23 There is no declaration from any Google witness that  
24 says you're supposed to include 36 features, because you're  
25 not.

1           **THE COURT:** Well, but for purposes of your second  
2 use, I wonder if that's correct. You said that the second way  
3 in which Dr. Cockburn uses this is to say that the features  
4 enabled by the patents-in-suit are important to consumers. But  
5 if you only test those features that are enabled by those  
6 patents, and ignore the other features, like wifi and camera,  
7 maybe you don't get the very good benchmark for comparison.

8           **MR. NORTON:** Well, that's -- if you only tested the  
9 features that are in dispute, then that would cause some  
10 complication.

11           **THE COURT:** So what, other than operating system and  
12 price -- that is true that that's all he tested.

13           **MR. NORTON:** No. Screen size is also not in dispute.

14           But Professor Cockburn has testified and stated in  
15 his declaration that he doesn't need to test the others in  
16 order to be able to calculate the effect on market share, so  
17 long as he's got a significant -- another factor is significant  
18 to consumers, brand and price, that he will be able to estimate  
19 the effect on market share. This is how conjoint is done.

20           **THE COURT:** That's not the two times part. That's a  
21 different -- market share, that's separate from the ratio of  
22 two to one.

23           **MR. NORTON:** That is correct.

24           **THE COURT:** How does he use market share then?

25           **MR. NORTON:** So what he does is by using the conjoint



1 analysis he's able to determine how many consumers would choose  
2 a different phone.

3           They would not choose the Android phone if the  
4 Android phone lacked the attributes that are provided by the  
5 patents and copyrights in suit. Those are called "preference  
6 shares" in his analysis. And there's a very close correlation  
7 between preference shares and market shares in the analysis.

8           So what he's able to do is by presenting -- the way  
9 the survey works, just to give a little more context, the  
10 consumers are shown each of the features. So this is the thing  
11 that we are going to ask you about: Launch time. Screen size.  
12 They're given a picture of a phone next to a Coca-Cola can so  
13 they can actually get a sense of perspective. They see all  
14 these things.

15           And then they are actually given choice sets, four  
16 phones with different permutations of features. And they say,  
17 I want the hundred dollar phone with the 4 second startup and  
18 the 40,000 applications, that's an Android phone. They pick  
19 that one.

20           Then they are given a new set of choices, and then  
21 another set of choices. And the computer software is able to  
22 refine the choices as they make their selections, to really  
23 hone in on which variables are the ones that are most important  
24 to this consumer.

25           And, as a result of that, Professor Shugan is able to

1 do a statistical analysis that tells him if the phone lacked  
2 the attributes that our technical experts say the infringement  
3 provides, how many consumers would not have bought their  
4 Android phone, they would have switched to something else?

5 And we see a substantial effect on market share as a  
6 result of not being able to infringe.

7 Now, in his September report, Professor Shugan  
8 actually translated that into dollars. If Google's market  
9 share declined by X, how many dollars would it lose? And then  
10 that was his numerator. And his denominator was the value of  
11 Android over the same period. Right. The Court has forbidden  
12 that analysis. He doesn't do it anymore. But that numerator  
13 is still a very important number.

14 If you didn't have these patents, if you didn't have  
15 these copyrights, would you lose a lot of market share? And  
16 the consumer survey says you would. You would lose a lot.

17 And Professor Cockburn considers that as one of the  
18 indicators of the value of these particular patents in these  
19 particular copyrights. But it's not necessary -- and, again,  
20 this is unrebutted. It is entirely unrebutted. It is not  
21 necessary, in performing a conjoint analysis, to include every  
22 feature.

23 In paragraph 25 of Professor Shugan's declaration, it  
24 is -- he testified that way in his deposition. It's just not  
25 how conjoint works.

1 And an argument that shows you 36 features and says  
2 the conjoint survey is methodologically flawed because it  
3 doesn't have all 36 of these or 18 of these is just a lawyer  
4 argument that fails to comprehend what Dr. Shugan's  
5 uncontroverted testimony establishes.

6 **THE COURT:** What do you say to the 24 percent error  
7 rate, that 24 percent gave irrational answers?

8 **MR. NORTON:** Okay. Well, there is what I say and  
9 there is what Professor Shugan says and they are saying.

10 Your Honor asked, is this a number that Google  
11 created, or is it actually something Dr. Shugan concedes? And,  
12 inexplicably, that was described as a concession.

13 So Dr. Shugan, in his declaration in support of our  
14 opposition -- this is docket 740 -- explains in great detail  
15 why that's wrong. And he did it back in September when we  
16 moved to strike the opinion of Dr. Leonard. He submitted a  
17 declaration then.

18 **THE COURT:** What do you then say is the correct error  
19 rate, or however you want to characterize irrational answers?  
20 What do you think is the correct rate of error?

21 **MR. NORTON:** What we are talking about is not a rate  
22 of error. So, the first mistake is that Google says that they  
23 have identified --

24 **THE COURT:** Irrational answer there.

25 **MR. NORTON:** There are --

1           **THE COURT:** People don't want to pay a hundred  
2 dollars more for nothing.

3           **MR. NORTON:** Sure.

4           **THE COURT:** So are you saying there's zero of those  
5 instances?

6           **MR. NORTON:** No. So, 8.8 percent of the responses  
7 indicate that individual consumers said, I will take the \$200  
8 phone over the hundred-dollar phone that is otherwise  
9 identical.

10           So the question is, does that -- what does that  
11 8.8 percent mean? We do see that. But the problem is that, in  
12 Google's critique, is that Professor Shugan -- I'm going to --  
13 Mr. Purcell said that there's a mathematical theorem that he's  
14 unable to explain. I'm going to find myself in the same  
15 position, shortly, but I can make a little headway.

16           Dr. Shugan uses something called a hierarchal  
17 Bayesian approach to probability. It is -- Bayes was a  
18 mathematician in the 18- --

19           **THE COURT:** I know what Bayesian probabilities are.

20           **MR. NORTON:** Good. All right. So it's Bayesian.  
21 It's Bayesian approach.

22           And the Bayesian approach, as Dr. Shugan has  
23 explained, I believe, three times now in submissions -- in  
24 testimonies and submission to the Court, you don't test a  
25 hierarchal Bayesian model by looking at individual responses

1 and saying these appear to be irrational.

2           There are different checks that you use to assess the  
3 robustness of the hierarchical Bayesian model. And he did  
4 that. There is a U squared. There is a hit rate. Those are  
5 disclosed in his original report. And those indicate that his  
6 survey is very robust and very good at predicting aggregate  
7 market share changes.

8           It is incoherent to critique Dr. Shugan's analysis by  
9 isolating individual choices and saying some set of individuals  
10 gave responses that we would not expect to see. You cannot  
11 critique a Bayesian analysis in that way.

12           There is some useful information about individual  
13 choices. But if you want to know whether this is a good study,  
14 this is the wrong way to do it. If it were what's called a  
15 frequentist approach, that might be a more useful critique.

16           So Dr. Shugan, in his declaration, in paragraphs  
17 35 -- I should say 34 through 44, deals directly with this  
18 criticism and explains why you cannot draw the conclusion that  
19 Google insists on drawing, the 8.8 -- it is not 24 percent.  
20 The number that they are trying to calculate is 8.8 percent.  
21 And the 8.8 percent does not mean what they say it means.

22           And where is the testimony that establishes that  
23 Professor Shugan is wrong? Where is the analysis that says  
24 that Professor Shugan, who has a Ph.D. in statistics and does  
25 this over and over again, doesn't understand Bayesian

1 probability? It doesn't exist because it's just not true.

2           So in paragraph 42 he explains precisely why this  
3 approach does not -- the approach being the 8.8 percent --  
4 doesn't mean what Google says it means.

5           In paragraph 40, he points out that what -- what  
6 Google's critique is they say, well, consumers can't be  
7 irrational. If you do a survey you expect all the consumers to  
8 give rational responses.

9           And we know from research, which Dr. Shugan quotes,  
10 that consumers don't always make rational choices. In any  
11 survey you get some responses that wouldn't make sense.

12           And so Google says, well, those show that the  
13 survey's irrational. But that's not true. It shows that  
14 consumers gave answers that you might not expect.

15           Now, is there a reason why you might think consumers  
16 would, in fact, sometimes say they prefer the more expensive  
17 phone? Again, Dr. Shugan says, yeah, that happens.

18           And there's literature on that, as well. And that is  
19 that people sometimes associate a higher price with prestige or  
20 durability. And so they're going to see that higher price and  
21 say, well, that's a phone -- I might prefer that phone because  
22 I want the more expensive phone.

23           And we all know people who prefer to buy the more  
24 expensive thing because they like the status that it confers.  
25 And Dr. Shugan addresses that directly.

1           So the fact some people say they would pay for a more  
2 expensive phone doesn't mean that the survey is irrational. It  
3 means that some people don't behave the way Google claims  
4 people ought to behave.

5           **THE COURT:** All right. I need to bring your part to  
6 a close. I'll give you one more point.

7           **MR. NORTON:** The Court asked whether Dr. Shugan had  
8 recalculated his results to address this particular argument.  
9 And he did. It is the -- the recalculation was in his  
10 declaration submitted, again, docket 740. It's at footnote 44  
11 of his declaration.

12           And what it says is that if you were to accept this  
13 argument and recalculate the numbers by throwing out those  
14 responses, the Android sales, but for the feature enhancements  
15 enabled by the patents-in-suit and copyrights in suit, would  
16 have been 7.6 percent, at least 7.6 percent lower, as opposed  
17 to his earlier calculation, 7.9 percent lower. So it does not  
18 have a substantial effect on the result if it were, in fact, a  
19 meritorious criticism.

20           **THE COURT:** All right. Let's hear rebuttal on these  
21 points. Not all the points, but just your main rebuttal.

22           **MR. PURCELL:** Thank you, Your Honor.

23           So I understand, of course, why Oracle likes to cite  
24 Dr. Cox's articles to us. But what Dr. Cox has opined as an  
25 economist on this issue, it's not the finding of a court. It's

1 not the finding of either the district court, much less the  
2 federal circuit, much less any other appeals court, that  
3 conjoint analyses are appropriate for estimating damages in a  
4 case like this.

5 Oracle hasn't cited any cases, they haven't provided  
6 any evidence that there, in fact, is any precedent for using  
7 this sort of analysis for this purpose.

8 The next point, just briefly, Oracle is attacking a  
9 straw man. I made very clear in my presentation to you that I  
10 was not saying that Dr. Shugan's methodology was reliable  
11 because he didn't include everything under the sun, he didn't  
12 test 39 features. That's not what we're talking about.

13 Mr. Norton just admitted that it is important to  
14 test, in addition to the features at issue in the litigation,  
15 the other features that are most important to consumers.

16 Dr. Shugan didn't do anything to figure out which of  
17 the omitted features was, in fact, important to consumers. He  
18 didn't include price. And, obviously, price is important. He  
19 didn't include operating system. Obviously, that's important.  
20 He didn't include a whole laundry list of other things. Didn't  
21 make any attempt in the focus group to ask respondents what  
22 they valued so he could even have an opinion about that  
23 question. He just completely ignored it.

24 And the third point, Mr. Norton harped on the fact  
25 that Google's expert supposedly didn't contravene what



1 Dr. Shugan did. Dr. Leonard did that, in fact, in a  
2 declaration that he submitted last year when Oracle moved to  
3 strike his rebuttal opinion.

4 But I'd just like to focus you on paragraph 39 of the  
5 Shugan declaration that Oracle itself submitted regarding the  
6 24 percent number. This is the declaration Oracle filed on the  
7 24th of February.

8 And Dr. Shugan writes, "Second, for the majority of  
9 the 24 percent of respondents the estimates for the two  
10 prices" -- that is the hundred dollar and \$200 prices -- "are  
11 so close that a diligent statistician would consider the  
12 difference to be zero, rather than representing some form of  
13 rationality. As I explained in my reply report, I excluded  
14 respondents with utilities associated with a hundred and \$200  
15 that are within one standard deviation of the difference in  
16 utilities between levels as a sensitivity analysis. When these  
17 respondents with such utility comparisons are excluded from the  
18 analysis only 8.8 percent, not 24 percent, prefer a price of  
19 \$200 over a price of \$100."

20 So what he's saying there is that 24 percent are  
21 either agnostic between the hundred dollar and the \$200 phone,  
22 or they prefer the \$200 phone. And that's exactly what we're  
23 saying.

24 So when they say we don't have any evidence, we have  
25 an admission. We have it in Dr. Shugan's own words. That's

1 exactly what he is saying here. And it affects the entire  
2 analysis. It's a problem with the methodology.

3 That's all I've got.

4 **THE COURT:** All right. What's your next criticism?

5 **MR. PURCELL:** Your Honor, I'm content to rest on the  
6 briefs with respect to the other criticisms. We raised the  
7 issue about copyright apportionment, about failure to perform a  
8 claim-by-claim analysis.

9 **THE COURT:** I have a couple of questions.

10 What happens -- I need to preface this by saying  
11 Dr. Cockburn's analysis is like an algebra problem. He has,  
12 the copyright part is one half of X. X is the patents-in-suit.  
13 Copyright API is one half X. And then everything else that is  
14 a patent in the 2006 bundle is Y, I guess. But it is a ratio  
15 of the -- you have to go through all of those. That's why I  
16 asked you to check my math because I must have done it wrong  
17 somewhere.

18 Now, this formula does not appear anywhere in the  
19 history of the universe. I understand that. But that doesn't  
20 mean you can't use algebra. Algebra we know about. And as  
21 long as his assumptions are valid, I guess that's okay.

22 Anyway, he uses that formula in the one half of the  
23 value of the patents-in-suit equals API value, in getting his  
24 apportionment.

25 All right. Here's my question. I have trouble

1 figuring out what happens if the federal Patent Office knocks  
2 out all but one patent, or the jury knocks out all but one  
3 patent. What then happens to this analysis?

4           So while you're standing there, have you worked your  
5 way through that analysis? I don't want you to guess at it.

6           What happens to the analysis in that algebraic  
7 formula, and where does that lead us if -- in other words, the  
8 conjoint study is based upon a set of answers that assumes  
9 certain features, and those were selected based on what  
10 infringed or didn't infringe.

11           But if it turns out those patents are not valid in  
12 the first place, then maybe the conjoint falls away, and the  
13 one half falls away, and the whole formula falls away, and we  
14 have no way to apportion. That's what I'm worried about.

15           Do you know the answer to that?

16           **MR. PURCELL:** The answer to that lies in the  
17 distinction that Your Honor discussed with Mr. Norton about the  
18 two separate uses of the conjoint.

19           One is to measure the relative preference as between  
20 number of applications and application speed. And I think  
21 that's a different use of the conjoint than if you're asking to  
22 determine a bottom line market share reduction number if a  
23 feature doesn't perform as well.

24           And so I think our challenge, our Daubert challenge,  
25 is directed at the second problem more than the first problem.

1           We were not -- at least, it's not in our brief that  
2 we're attacking the conjoint as an idea of measure of relative  
3 preference.

4           I think what Dr. Cockburn has done is calculated the  
5 value of the five patents-in-suit now, assuming that they are  
6 all infringed. He has calculated subcategories for what each  
7 of the individual patents are worth.

8           **THE COURT:** Where is that? Where can I find that?

9           **MR. PURCELL:** I believe that is at the very end of  
10 his exhibits. It might be Exhibit 37. Exhibit 37 has  
11 percentages.

12           I think Oracle may have prepared a slide for this,  
13 that I can direct you to. It's slide 3, Your Honor, in the  
14 smaller binder Oracle handed up.

15           **THE COURT:** All right.

16           **MR. PURCELL:** So if that analysis is sustained -- and  
17 we haven't challenged it, other than to the extent it relies on  
18 things we have challenged, but we haven't challenged that  
19 specific apportionment. If that stands, then that would allow  
20 for a patent-by-patent liability determination.

21           **THE COURT:** All right.

22           **MR. PURCELL:** With the copyright, still, I think  
23 being half of what the broader number would have been had all  
24 those patents been invalid and infringed.

25           **THE COURT:** What does the other side say to that

1 question? Do you agree with what counsel just said?

2 **MR. NORTON:** It's very close.

3 The value of the copyrights is equal to half the  
4 value of speed, as measured by the conjoint. The value of  
5 speed, based on the 2006 deal between the parties that was  
6 never consummated, is calculated by Professor Cockburn.

7 So even if the patents are not valid and infringed,  
8 we know what a group of patents that gave you an incremental  
9 benefit, in terms of performance, would be. And we know the  
10 patents -- the copyrights would be worth half that.

11 So the number is still a meaningful number, even if  
12 no infringement were ever proven as to those patents. So you  
13 don't need to prove patent infringement to have a copyright --

14 **THE COURT:** So let's say the jury determines all of  
15 them are invalid, patent-wise, but then your position is that  
16 the number for copyright on the apportionment of the original  
17 2006, that that copyright API number remains the same  
18 regardless, regardless of which patents are valid or not.

19 **MR. NORTON:** Right. Because the value of the  
20 copyrights is not actually dependent on the value of the  
21 patents.

22 We know there is a relationship between the value of  
23 the benefits the patents provide and -- let me put it this way.  
24 Let's say that the patents were not valid, but they were  
25 infringed. So Google really did do those things. They really

1 did use the inventions, and they got the benefits from the  
2 inventions, and they got the value. In that event, we would  
3 fail to prove our patent infringement case.

4 But all the evidence that we have that shows that the  
5 benefits of speed are precisely what we claim they are, all  
6 that would still apply.

7 So the copyright's value doesn't actually depend upon  
8 the value of the patents. We've used the value of the patents  
9 as a tool to help us measure the value of the copyrights,  
10 assuming the patents are valid and infringed. And even if that  
11 assumption were false, the measurement of value would still be  
12 useful.

13 **THE COURT:** Thank you.

14 I have a question for Mr. John Cooper. That is, if  
15 we set a trial for April 16th, which is right now where I've  
16 told the lawyers to be ready for, is the expert going to be  
17 ready to go before that?

18 In other words, I would like to have his report done  
19 and his deposition taken, and all of that, before the trial  
20 date starts.

21 **MR. COOPER:** Yes, Your Honor.

22 **THE COURT:** And is his report going to include a  
23 critique of considerations that were used by both sides'  
24 experts?

25 **MR. COOPER:** Yes.

1           **THE COURT:** All right. On the subject of the --  
2 thank you. Have a seat.

3           On the subject of the Daubert, if anyone has one last  
4 word you want to put in, now is the time to do it by way of a  
5 parting last statement.

6           **MR. NORTON:** I have certainly endeavored to answer  
7 all the Court's questions.

8           If there is anything that the Court remains uncertain  
9 about with respect to what Professor Cockburn did, or his  
10 reasons for why he did them, he is, of course, here today and  
11 is prepared to testify and answer questions directly from the  
12 Court or from counsel about why he used the studies, why the  
13 studies are appropriate, or anything else that may be of  
14 concern to the Court.

15           **THE COURT:** Let me ask Google, do you want to take  
16 this opportunity to cross-examine Dr. Cockburn? I'll put him  
17 on the stand and let you have a free shot at him, if that's  
18 what you want.

19           **MR. PURCELL:** No, Your Honor.

20           **THE COURT:** All right. Then I'm going to pass on  
21 the -- I'm not going to ask him questions.

22           **MR. NORTON:** Thank you, Your Honor.

23           **THE COURT:** Okay. Do you have anything on your side?

24           **MR. PURCELL:** No, Your Honor. That's all.

25           **THE COURT:** All right. We will adjourn for now.

1 And, in due course, I will get an order out.

2 I want our 706 expert to be prepared to do your  
3 report quickly. But I want it to be, of course, your best shot  
4 at it. This is now early March. It may be that you'll be --  
5 by the end of this month, you may be in depositions defending  
6 your own work.

7 All right. We're adjourned. Thank you.

8 (Counsel thank the Court.)

9 (At 10:24 a.m. the proceedings were adjourned.)

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14 **CERTIFICATE OF REPORTER**

15 I certify that the foregoing is a correct transcript  
16 from the record of proceedings in the above-entitled matter.

17

18 DATE: Wednesday, March 14, 2012

19

20 s/b Katherine Powell Sullivan

21

22 Katherine Powell Sullivan, CSR #5812, RPR, CRR  
23 U.S. Court Reporter

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